JVC

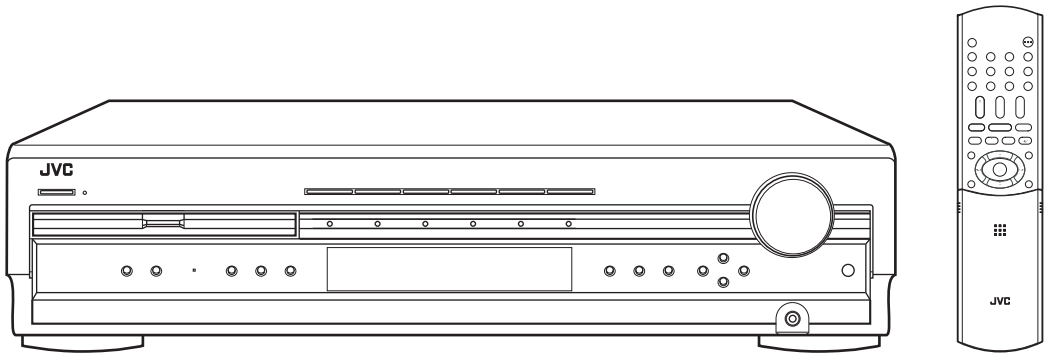
SERVICE MANUAL

HOME THEATER DVD-AUDIO/VIDEO RECEIVER

RX-DV31SL

Area suffix

J ---------- U.S.A.
C ---------- Canada



AV COMPU LINK
Digital Direct Progressive Scan

TABLE OF CONTENTS

1 PRECAUTION 1-3
2 SPECIFIC SERVICE INSTRUCTIONS 1-5
3 DISASSEMBLY 1-6
4 ADJUSTMENT 1-21
5 TROUBLE SHOOTING 1-22
6 DESCRIPTION OF MAJOR ICS 1-23

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No.22023
2003/6

SPECIFICATION

Amplifier	Output Power		At Stereo operation	Front channels	100 W per channel, min. RMS, driven into 8 Ω, 40 Hz to 20 kHz with no more than 0.8% total harmonic distortion.
			At Surround operation	Front channels	100 W per channel, min. RMS, driven into 8 Ω at 1 kHz, with no more than 0.8% total harmonic distortion.
				Center channel	100 W, min. RMS, driven into 8 Ω at 1 kHz, with no more than 0.8% total harmonic distortion.
				Surround channels	100 W per channel, min. RMS, driven into 8 Ω at 1 kHz, with no more than 0.8% total harmonic distortion.
Audio	Audio Input Sensitivity/ Impedance (1 kHz)		TV, TAPE/CDR, DBS, VCR		240 mV/47 kΩ
	Audio Input (DIGITAL IN)*		Coaxial	DIGITAL 1 (DBS)	0.5 V(p-p)/75 Ω
			Optical	DIGITAL 2 (TV)	-21 dBm to -15 dBm (660 nm ±30 nm)
			* Corresponding to Linear PCM, Dolby Digital, and DTS Digital Surround (with sampling frequency-32 kHz, 44.1 kHz, 48 kHz).		
	Signal-to-Noise Ratio ('66 IHF/'78 IHF)		TV, TAPE/CDR, DBS, VCR		87 dB/67 dB
	Frequency Response (8 Ω)		TV, TAPE/CDR, DBS, VCR		20 Hz to 20 kHz (±1 dB)
	Tone Control		Bass (100 Hz)	±10 dB ±2 dB	
			Treble (10 kHz)	±10 dB ±2 dB	
Video	Video Input Sensitivity/ Impedance (1 kHz)	Composite video	DBS IN, VCR IN		1 V(p-p)/75 Ω
		S-video	DBS IN, VCR IN	(Y:luminance)	1 V(p-p)/75Ω
				(C:chrominance)	0.286 V(p-p)/75 Ω
	Video Output Level/Impedance (1 kHz)	Composite video	VCR OUT, MONITOR OUT		1 V(p-p)/75 Ω
		S-video	VCR OUT, MONITOR OUT	(Y:luminance)	1 V(p-p)/75 Ω
				(C:chrominance)	0.286 V(p-p)/75 Ω
		Component video	DVD COMPONENT VIDEO OUT	(Component-Y)	1.0 V(p-p)/75 Ω
				(Component-PB/PR)	0.7 V(p-p)/75 Ω
		Color System	NTSC		
		Horizontal Resolution	500 lines		
		Signal-to-Noise Ratio (S/N)	63 dB		
		Synchronize	Negative		
FM tuner (IHF)	Tuning Range	87.5 MHz to 108.0 MHz			
AM tuner	Tuning Range	530 kHz to 1 710 kHz			
General	Power Requirements	AC 120 V , 60 Hz			
	Power Consumption	200 W/255 VA (in operation) 2 W (in standby mode)			
	Dimensions (W × H × D)	435 mm × 100 mm × 403.5 mm (17 3/16 in. × 3 15/16 in. × 15 15/16 in.)			
	Mass	8.4 kg (18.5 lbs)			

SECTION 1
PRECAUTION

1.1 Safety Precautions

(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

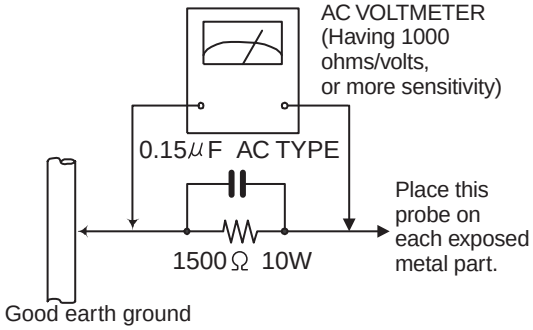
(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
  Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
  Measure the AC voltage across the resistor with the AC voltmeter.
  Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5μ mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

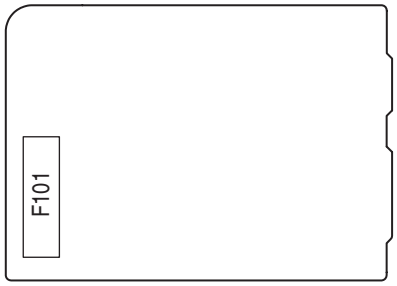
Burrs formed during molding may be left over on some parts of the chassis.
Therefore, pay attention to such burrs in the case of preforming repair of this system.

1.4 Critical parts for safety

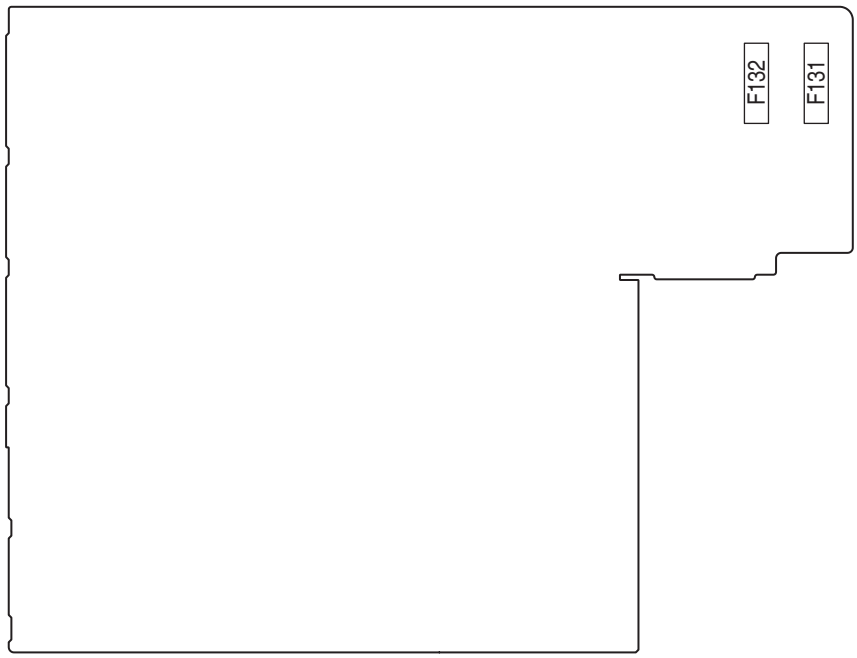
In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the " ⚠ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Importance administering poin on the safety

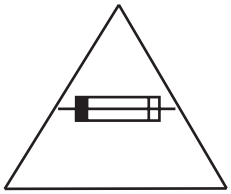
Power board (Forward side)



Main board (Forward side)



For USA and Canada / pour États - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 5A/125V for F101, 2A/125V for F131 and F132.
This symbol specifies type of fast operating fuse.

Précaution: Pour eviter risques de feux, remplacez le fusible de sureté de F101 comme le meme type que 5A/125V, et 2A/125V pour F131 et F132.
Ce sont des fusibles sûretes qui functionnes rapide.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body section

3.1.1 Removing the top cover (See Fig.1)

(1) From the both sides of the main body, remove the four screws **A** attaching the top cover.
(2) From the back side of the main body, remove the three screws **B** attaching the top cover.
(3) Remove the top cover in the direction of the arrow 2 while extending the lower sections of the top cover in the direction of the arrow 1.

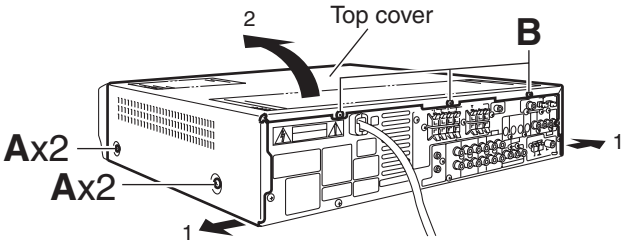


Fig.1

3.1.2 Removing the front panel assembly (See Figs.2 to 4)

• Prior to performing the following procedures, remove the top cover.
(1) From the top side of the main body, disconnect the card wire from the connector CN114 on the main board. (See Fig.2.)
(2) Remove the screw **C** attaching the earth wire and sub trans. Board. (See Fig.2.)
(3) From the bottom side of the main body, remove the five screws **D** attaching the front panel assembly. (See Fig.3.)
(4) From the both side of the main body, release the two joints **a** using a flat-bladed screwdriver and remove the front panel assembly in the direction of the arrow. (See Fig.4.)

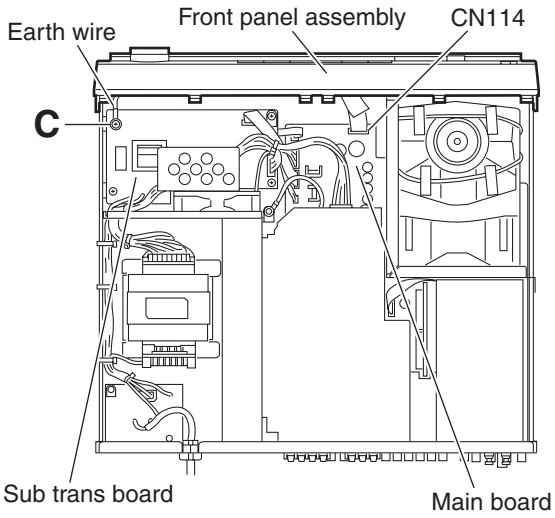


Fig.2

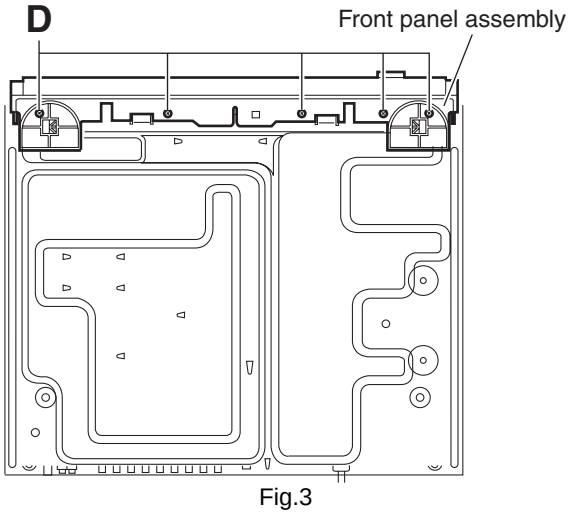


Fig.3

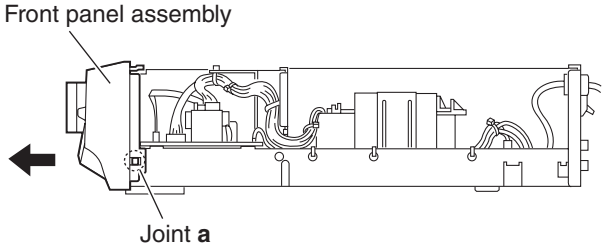


Fig.4

3.1.3 Removing the rear panel (See Fig.5)

- Prior to performing the following procedures, remove the top cover.
  (1) From the back side of the main body, remove the strain relief from the rear panel in the direction of the arrow.
  (2) Remove the twenty three screws **E** attaching the each board to the rear panel.
  (3) Remove the four screws **F** attaching the rear panel.

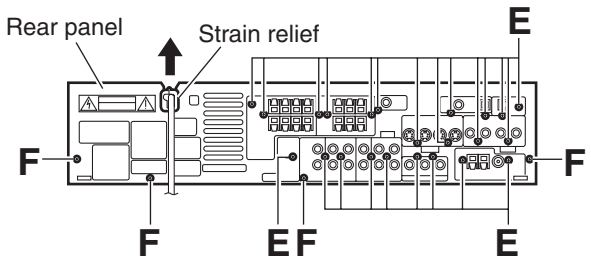


Fig.5

3.1.4 Removing the DSP board (See Figs.6 and 7)

- Prior to performing the following procedures, remove the top cover.
  (1) From the back side of the main body, remove the four screws **G** attaching the DSP board to the rear panel. (See Fig.6.)
  (2) From the top side of the main body, disconnect the DSP board from the connector CN611 on the DSP connector board. (See Fig.7.)
  (3) From the left side of the main body, lift the DSP board in the direction of the arrow and disconnect the card wire from the connector CN602 on the DSP board. (See Fig.7.)
  (4) Take out the DSP board.

3.1.5 Removing the video jack board (See Figs.6 and 7)

- Prior to performing the following procedures, remove the top cover and DSP board.
  (1) From the back side of the main body, remove the four screws **H** attaching the video jack board. (See Fig.6.)
  (2) Disconnect the card wire from the connector CN402 on the video jack board and take out the video jack board. (See Fig.7.)

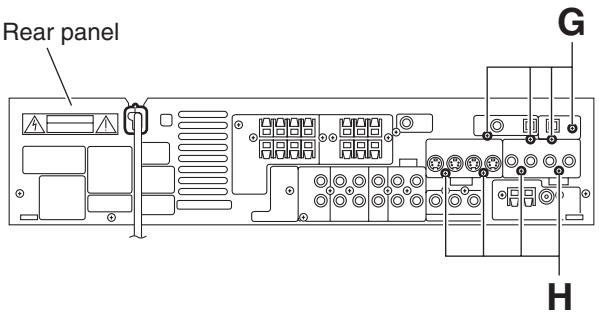


Fig.6

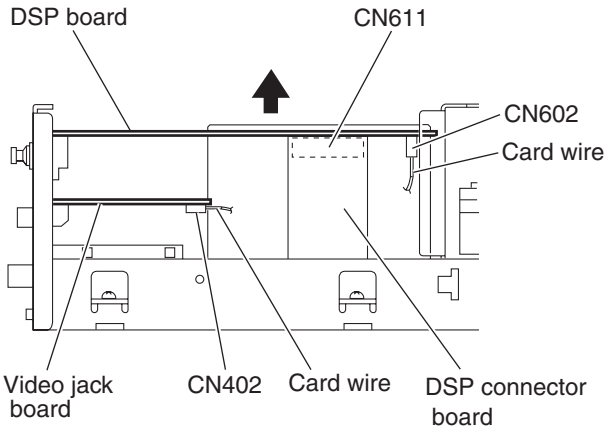


Fig.7

3.1.6 Removing the tuner (See Figs.8 and 9)

- Prior to performing the following procedures, remove the top cover, DSP board and video jack board.
  (1) From the back side of the main body, remove the two screws **J** attaching the tuner. (See Fig.8.)
  (2) From the top side of the main body, disconnect the card wire from the connector CN1 on the tuner. (See Fig.9.)
  (3) Take out the tuner.

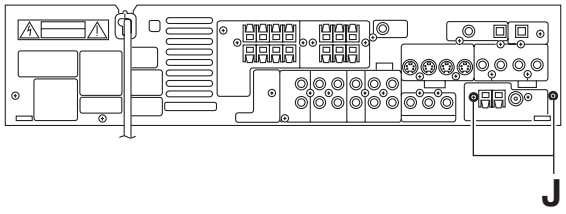


Fig.8

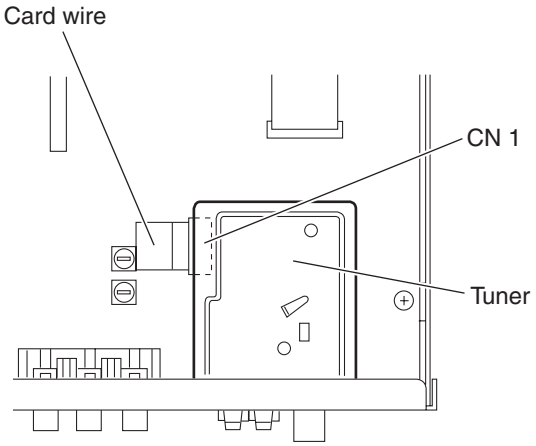


Fig.9

3.1.7 Removing the DAC board (See Fig.10)

- Prior to performing the following procedures, remove the top cover.
  (1) From the top side of the main body, disconnect the DAC board from the connectors CN911 and CN912 on the main board.

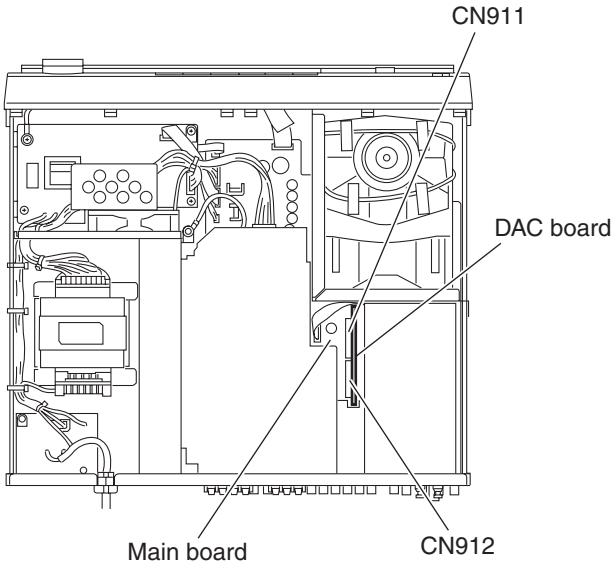


Fig.10

3.1.8 Removing the amp. board (See Fig.11)

- Prior to performing the following procedures, remove the top cover and rear panel.
  (1) From the top side of the main body, disconnect the wire from the connector CN201 on the amp. board.
  (2) Remove the screw **K** attaching the earth wire to the heat sink barcket.
  (3) Remove the four screws **L** attaching the amp. board.
  (4) Disconnect the connector CN202 on the amp. board.
  (5) Lift the amp. board and disconnect the wire from the connector CN231 on the main board.
  (6) Disconnect the parallel wire from the connector CN241 on the main board and take out the amp. board.

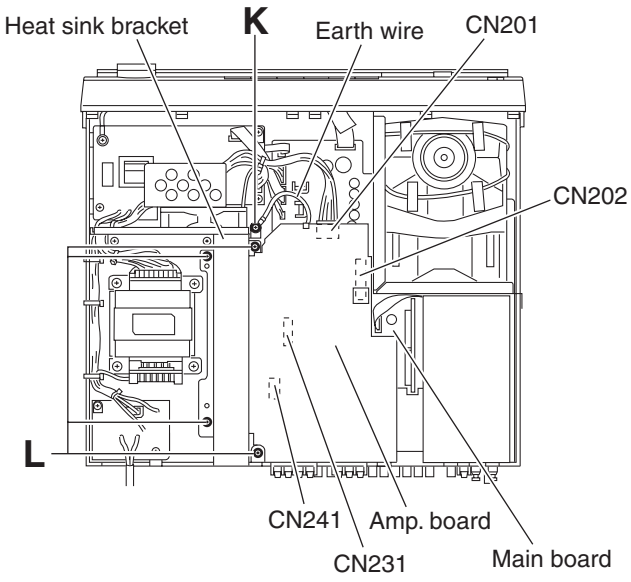


Fig.11

3.1.9 Removing the heat sink (See Fig.12)

- Prior to performing the following procedures, remove the top cover, rear panel and amp. board.
  (1) Remove the screw **M** attaching the H.sensor board.
  (2) Remove the five screws **N** attaching the IC bracket, heat sink bracket and heat sink.

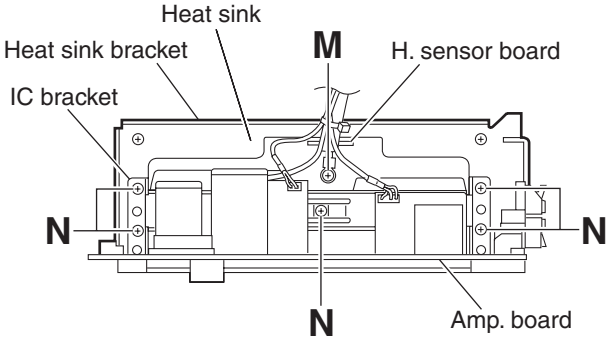


Fig.12

3.1.10 Removing the power ICs (See Fig.13)

- Prior to performing the following procedures, remove the top cover, rear panel, amp. board and heat sink.
  (1) From the reverse side of the amp. board, remove the solders from the soldered points **b** attaching the power ICs to the amp. board.

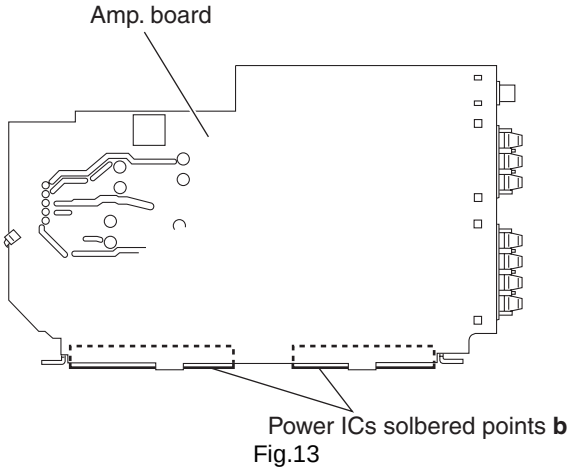


Fig.13

3.1.11 Removing the amp. sub(a) board and amp. sub(b) board (See Fig.14)

- Prior to performing the following procedures, remove the top cover, rear panel and amp. board.
  (1) From the forward side of the amp. board, disconnect the amp. sub(a) board from the connector CN203 on the amp board.
  (2) Disconnect the amp. sub(b) board from the connector CN204 on the amp. board.

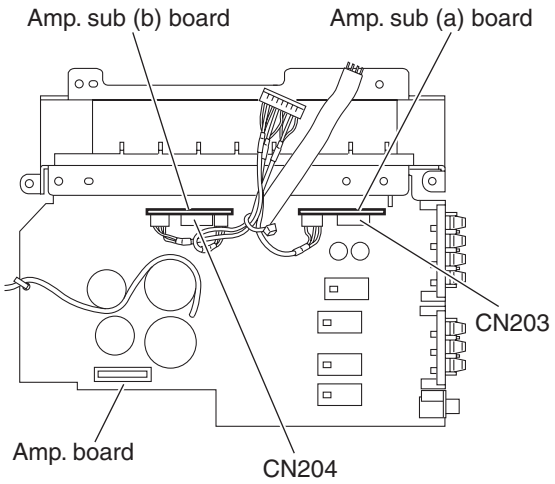


Fig.14

3.1.12 Removing the DVD mechanism assembly (See Fig.15)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the top side of the main body, remove the screw **P** and two screws **Q** attaching the DVD mechanism assembly.

  Reference:
  - When attaching the screw **P**, attach the thrust spring together with it.
  - When attaching the screw **Q**, attach the earth wires together with them.

  (2) Disconnect the DVD mechanism assembly from the connectors CN512 and CN513 on the main board.
  (3) Take out the DVD mechanism assembly.

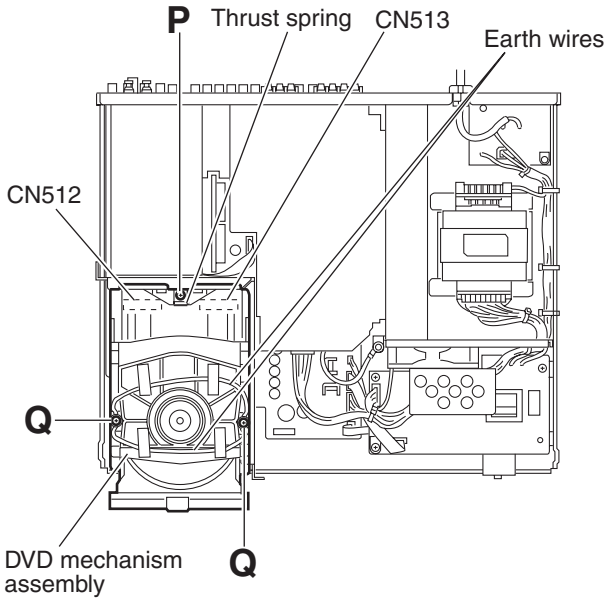


Fig.15

3.1.13 Removing the main board (See Fig.16)

- Prior to performing the following procedures, remove the top cover, rear panel, DAC board, DSP board, video jack board, tuner, amp. board and DVD mechanism assembly.
  (1) From the top side of the main body, disconnect the fan motor wire from the connector CN122 on the main board.
  (2) Disconnect the card wire from the connector CN125 on the main board.
  (3) Disconnect the wire from the connector CN121 on the main board.
  (4) Disconnect the parallel wire from the connector CN291 on the main board.
  (5) Remove the five screws **R** attaching the main board.

Reference:

Remove the barrier, DSP connector board and amp. connector board as required.

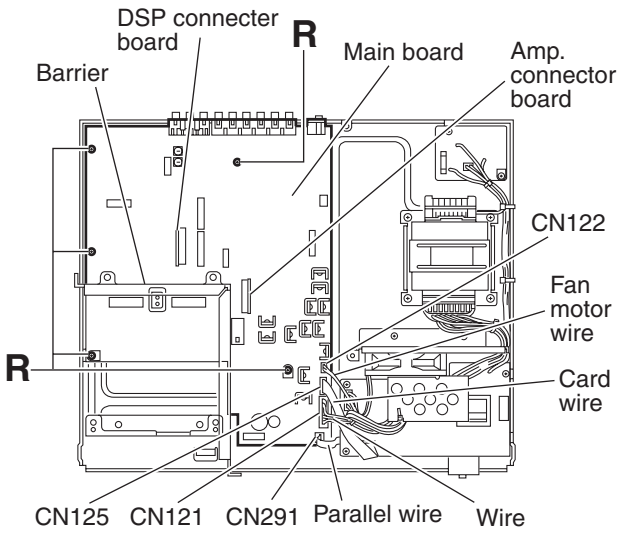


Fig.16

3.1.14 Removing the sub trans. Board
(See Fig.17)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the top side of the main body, remove the tie band bundling the wires.
  (2) Disconnect the card wire from the connector CN115 on the sub trans. board.
  (3) Disconnect the wire from the connector CN111 on the sub trans. board.
  (4) Disconnect the wire from the connector CN201 on the amp. board.
  (5) Remove the three screws **S** attaching the sub trans. board.
  (6) From the reverse side of the sub trans. board, remove the solders from the soldered points **c** attaching the wires.

3.1.15 Removing the fan motor
(See Figs.17 and 18)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the top side of the main body, remove the tie band bundling the wires. (See Fig.17.)
  (2) Disconnect the fan motor wire from the connector CN122 on the main board. (See Fig.17.)
  (3) From the front side of the main body, remove the four screws **T** attaching the fan motor to the fan bracket. (See Fig.18.)
  (4) Take out the fan motor in the direction of the arrow. (See Fig.18.)

Reference:

- When attaching the screws **T**, attach the wire holder and wire clamp together with them. (See Fig.18.)
- After attaching the fan motor, bundle the wires using the wire clamp. (See Fig.18.)

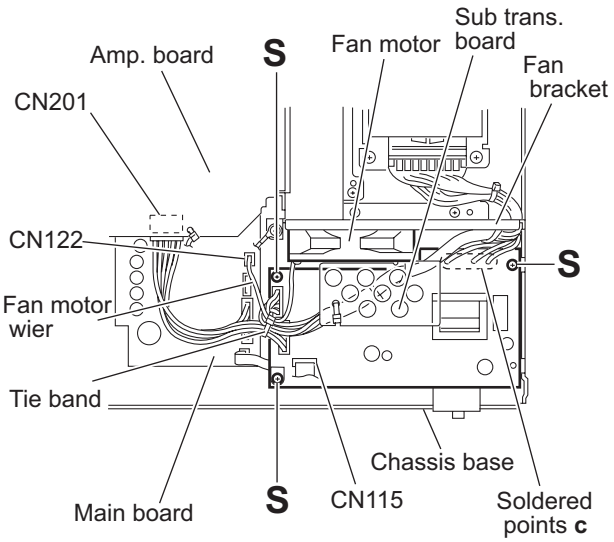


Fig.17

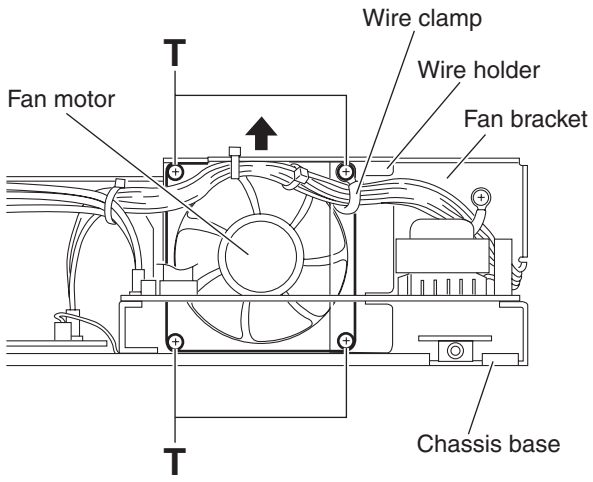


Fig.18

3.1.16 Removing the power board (See Fig.19)

- Prior to performing the following procedures, remove the top cover.
  (1) From the top side of the main body, disconnect the wire from the connector CN101 on the power board.

  Reference:
  Remove the tie bands as required.
  (2) Remove the solders from the soldered points **d** attaching the power cord.
  (3) Remove the two screws **U** attaching the power board.
  (4) From the reverse side of the power board, remove the solders from the soldered point **e** attaching the wires.

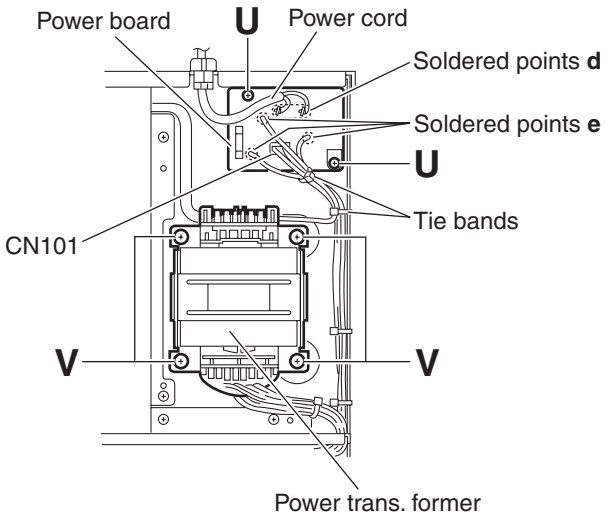


Fig.19

3.1.17 Removing the power trans. former (See Figs.19 and 20)

- Prior to performing the following procedures, remove the top cover.
  (1) From the top side of the main body, remove the tie bands and wire clamps bundling the wires. (See Fig.20.)
  (2) Disconnect the wire from the connector CN121 on the main board. (See Fig.20.)
  (3) Disconnect the wires from the connector CN111 on the sub trans. board. (See Fog.20.)
  (4) Remove the two screws **U** attaching the power board and then turn over the power board. (See Fig.19.)
  (5) Remove the solders from the soldered points **e** attaching the wires. (See Fig.19.)
  (6) Remove the four screws **V** attaching the power trans. former. (See Fig.19.)
  (7) Take out the power trans. former.

3.1.18 Removing the headphone board (See Fig.20)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the top side of the main body, disconnect the parallel wire from the connector CN291 on the main board.
  (2) Remove the three screws **S** attaching the sub trans. board.

  Reference:
  It is not necessary to remove the wire from the sub trans. board.
  (3) Remove the screw **W** attaching the headphone board while lifting the sub trans. board slightly.

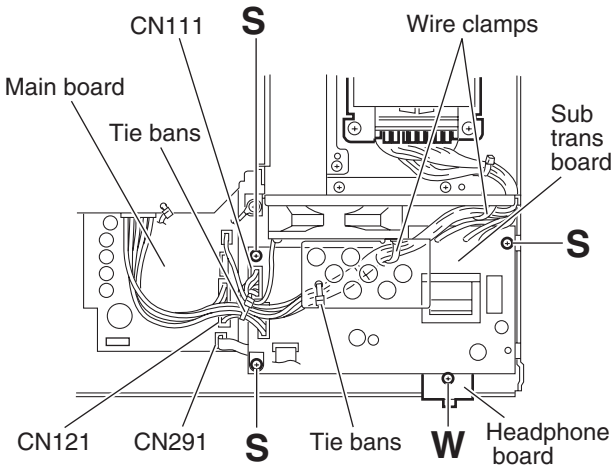


Fig.20

3.2 Front panel assembly section

3.2.1 Removing the FL board (See Figs.21 and 22)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the front side of the front panel assembly, pull out the volume knob assembly in the direction of the arrow. (See Fig.21.)
  (2) From the back side of the front panel assembly, remove the eight screws **X** attaching the FL board. (See Fig.22.)
  (3) Disconnect the wire from the connector CN703 on the FL board while lifting the FL board slightly. (See Fig.22.)
  (4) Remove the solders from the soldered points **f** and **g** attaching the parallel wires while lifting the FL board. (See Fig.22.)
  (5) Take out the FL board from the front panel assembly.

Reference:

Remove the parallel wires as required.

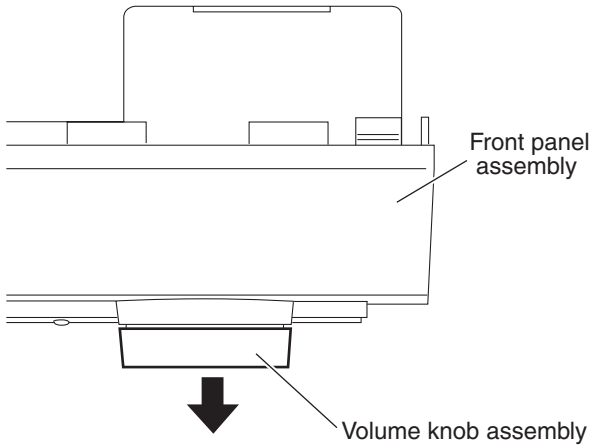


Fig.21

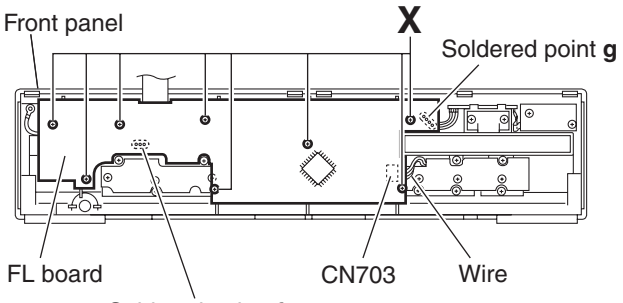


Fig.22

3.2.2 Removing the control board (See Fig.23)

- Prior to performing the following procedures, remove the top cover, front panel assembly and FL board.

Reference:

It is not necessary to remove the parallel wires from the FL board.

(1) Remove the three screws **Y** attaching the control board.
(2) Remove the solders from the soldered points **h** attaching the parallel wire while lifting the control board.

Reference:

Remove the parallel wire as required.

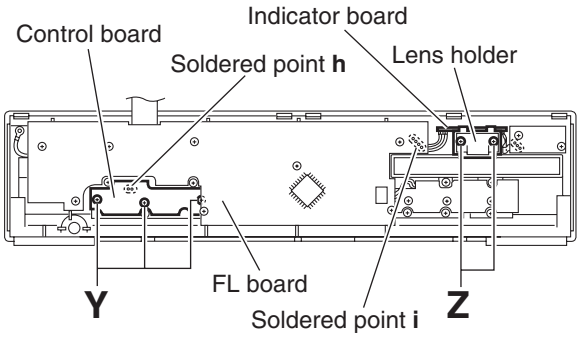


Fig.23

3.2.3 Removing the indicator board (See Fig.23)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the back side of the front panel assembly, remove the two screws **Z** attaching the lens holder.
  (2) Remove the solders from the soldered points **i** on the FL board attaching the parallel wire.
  (3) Remove the solders from the soldered points **j** on the power switch board attaching the parallel wire.

Reference:

Remove the parallel wires as required.

3.2.4 Removing the power switch board (See Fig.24)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the back side of the front panel assembly, remove the two screws **AA** attaching the power switch board.
  (2) Remove the solders from the soldered points **j** on the power switch board attaching the parallel wire.

Reference:

Remove the parallel wire as required.

3.2.5 Removing the speaker SW. board (See Fig.24)

- Prior to performing the following procedures, remove the top cover and front panel assembly.
  (1) From the back side of the front panel assembly, remove the three screws **AB** attaching the speaker SW. board.
  (2) Disconnect the wire from the connector CN703 on the FL board.

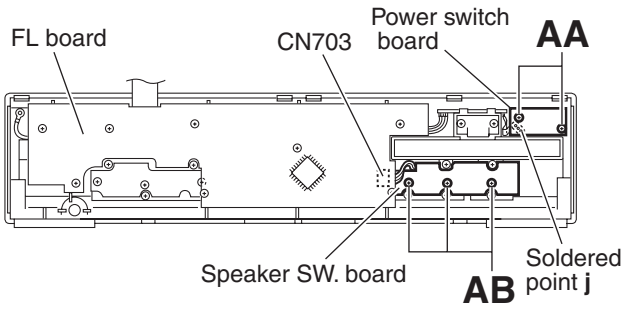


Fig.24

3.3 DVD mechanism section

- Remove the top cover.
- Remove the front panel assembly.
- Remove the DVD mechanism assembly.

3.3.1 Removing the tray (See Figs.1 and 2)

(1) From the left side of the DVD mechanism assembly, push the slide cam in the direction of the arrow 1 and then pull out the tray in the direction of the arrow 2. (See Fig.1.)

(2) Push the tray stoppers **a** in the direction of the arrow 3, pull out the tray in the direction of the arrow 4. (See Fig.2.)

3.3.2 Attaching the tray (See Fig.2)

When attaching the tray, insert the tray to the rail of the DVD mechanism assembly and then push the tray in the DVD mechanism assembly.

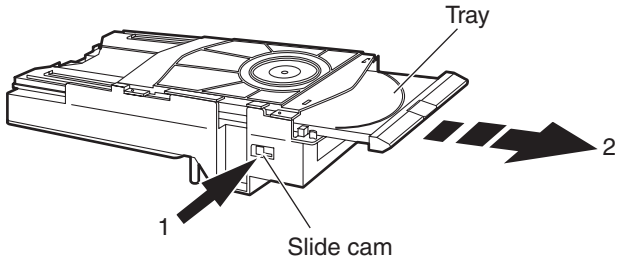


Fig.1

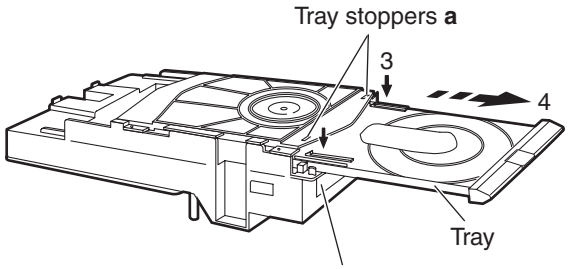


Fig.2

3.3.3 Removing the tray (See Fig.3)

(1) From the bottom side of the DVD mechanism assembly, disconnect the card wires from the connectors CN201 and CN202 on the DVD servo board.

Caution:

Be sure to solder the short land sections **b** on the flexible wire before disconnecting the flexible wire from connector CN101 on the DVD servo board.

If the flexible wire is disconnected without attaching solder, the DVD pickup unit may be destroyed by static electricity.

(2) Release the locks of the connector CN101 on the DVD servo board in the direction of the arrow 1, disconnect the flexible wire.

Caution:

In the assembly, be sure to remove solders from the short land sections **b** after connecting the flexible wire to the connector CN101 on the DVD servo board.

(3) While pushing the claws **c** of the DVD mechanism assembly in the direction of the arrow 2, remove the DVD servo board in an upward direction.

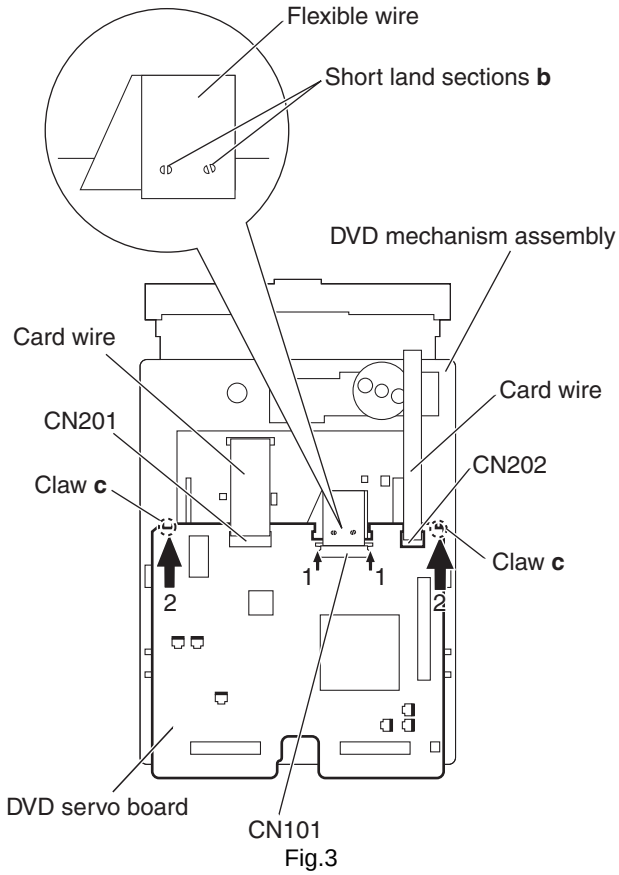


Fig.3

3.3.4 Removing the clamper base (See Fig.4)

(1) From the top side of the DVD mechanism assembly, remove the four screws **A** attaching the clamper base.
(2) Remove the clamper base from the bosses d of the loading base in an upward direction, remove the clamper base from the sections **e** while sliding it in the direction of the arrow.

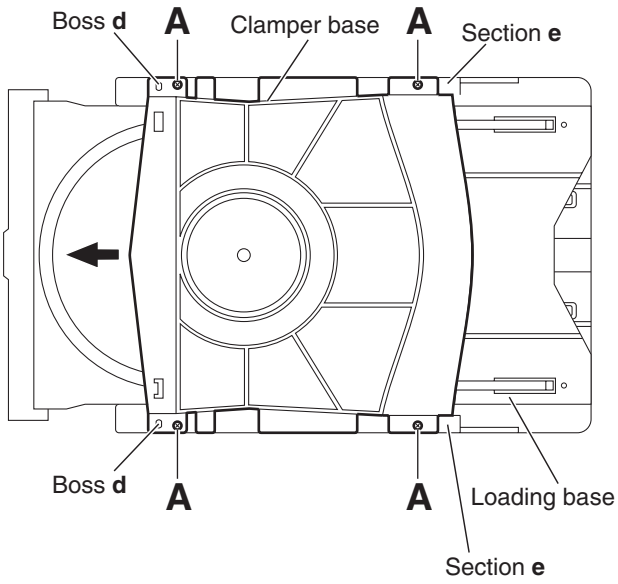


Fig.4

3.3.5 Removing the tray drive board (See Fig.5)

- Remove the clamper base.

(1) From the bottom side of the DVD mechanism assembly, disconnect the card wire from the connector on the tray drive board.
(2) Remove the solders from the soldered sections **f** on the tray drive board.
(3) Remove the screw **B** attaching the tray drive board to the DVD mechanism assembly.

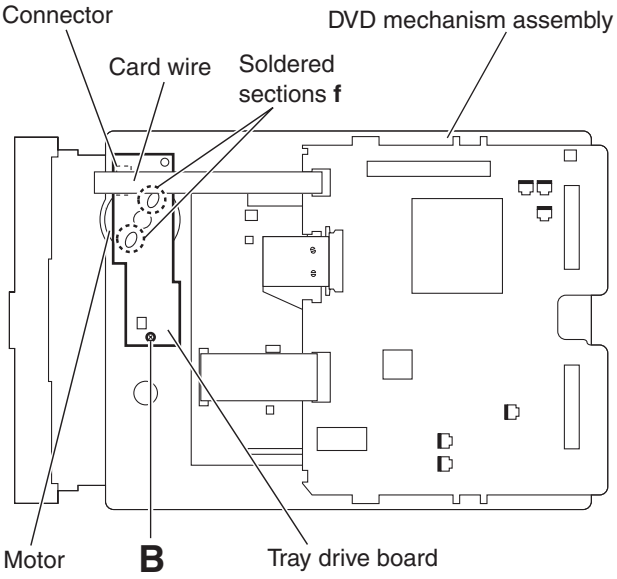


Fig.5

3.3.6 Removing the motor (See Fig.6)

- Remove the clamper base.
- Remove the tray drive board.

(1) From the top side of the DVD mechanism assembly, remove the belt of the pulley gear.

Note:
Take care not to attach grease on the belt.

(2) Remove the screw **C** attaching the motor to the DVD mechanism assembly.

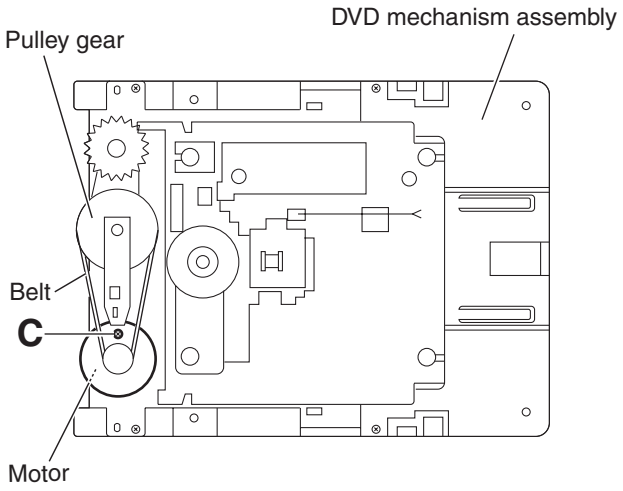


Fig.6

3.3.7 Removing the DVD traverse mechanism assembly (See Figs.7)

- Remove the DVD servo board.
- Remove the clamper base.

(1) From the top side of the DVD mechanism assembly, remove the four screws **D** attaching the DVD traverse mechanism assembly to the loading base.

(2) Take out the DVD traverse mechanism assembly from the loading base.

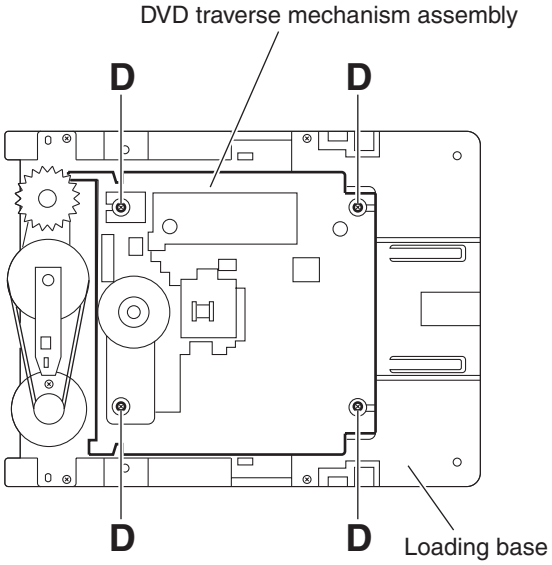


Fig.7

3.3.8 Removing the DVD pickup unit (See Figs.8 to 10)

- Remove the DVD servo board.
- Remove the clamper base.
- Remove the DVD traverse mechanism assembly.
  (1) From the top side of the DVD traverse mechanism assembly, remove the screw **E** attaching the plate and torsion spring. (See Fig.8.)
  (2) Remove the shaft from the section **g** and then remove the shaft from the section **h**. (See Fig.9.)
  (3) Disengage the section **i** of the DVD pickup unit and then remove the DVD pickup unit with the shaft. (See Fig.9.)
  (4) Pull the shaft out of the DVD pickup unit. (See Fig.10.)
  (5) Remove the two screws **F** attaching the SW. actuator. (See Fig.10.)

3.3.9 Attaching the DVD pickup unit (See Figs.8, 10 to 12)

Reference:

Refer to the explanation of "Removing the DVD pickup unit" on the preceding page.

(1) Attach the SW. actuator and shaft to the DVD pickup unit. (See Fig.10.)
(2) Engage the section **i** of the DVD pickup unit to the shaft of the DVD traverse mechanism assembly first, and set the both ends of the shaft of the DVD pickup unit in the sections **g** and h of the DVD traverse mechanism assembly. (See Fig.11.)
(3) Slide the DVD pickup unit all the way in the direction of the arrow. (See Fig.12.)
(4) Mesh the lead screw to the section **j** of DVD pickup unit and then set the end of the lead screw to the section **k**. (See Fig.12.)
(5) Attach the torsion spring. (See Fig.8.)
(6) Attach the plate. (See Fig.8.)

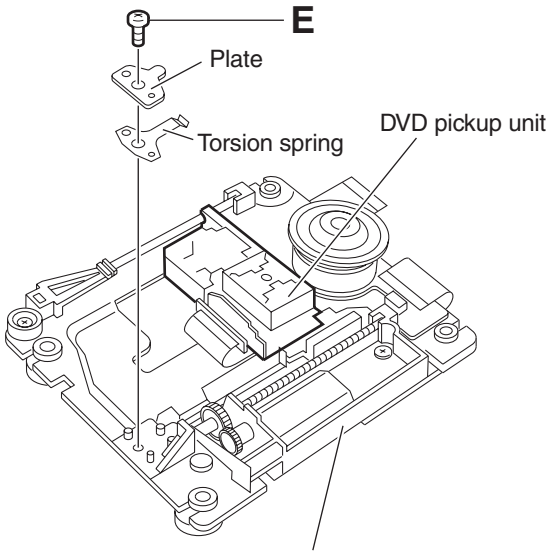


Fig.8

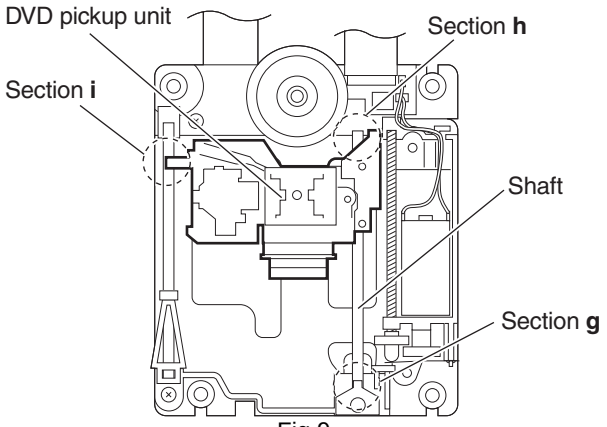


Fig.9

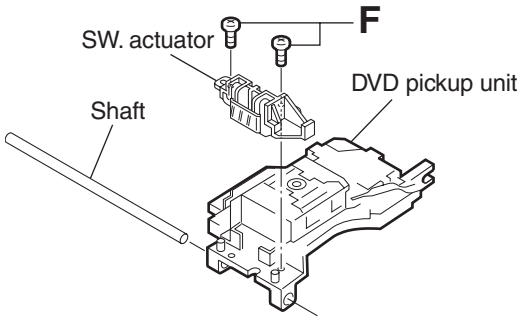


Fig.10

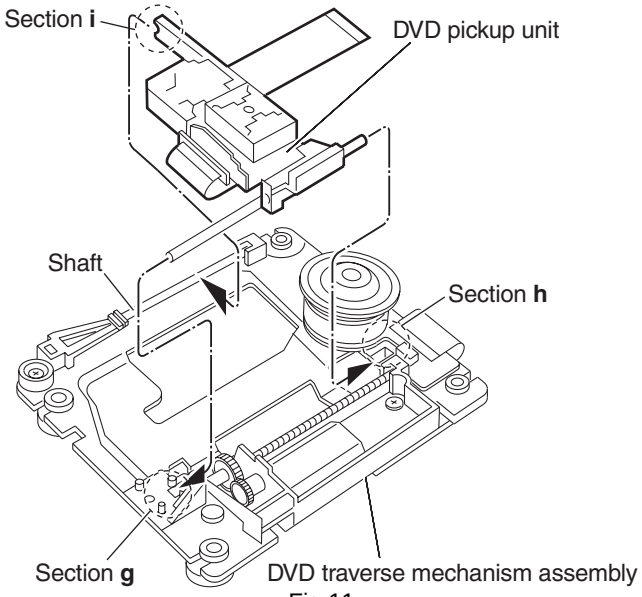


Fig.11

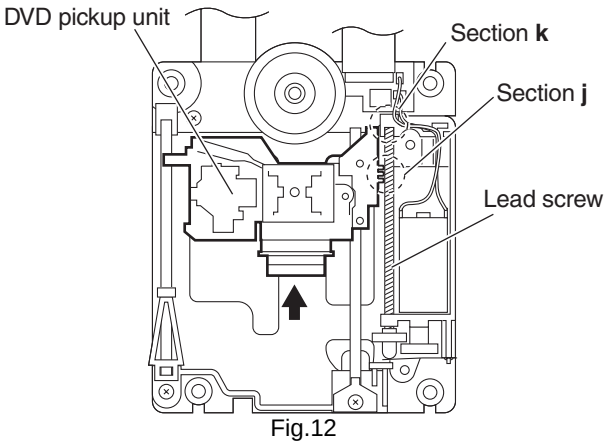


Fig.12

3.3.10 Removing the spindle motor board (See Figs.13 and 14)

- Remove the DVD servo board.
- Remove the clamper base.
- Remove the DVD traverse mechanism assembly.
  (1) From the top side of the DVD traverse mechanism assembly, remove the feed motor wire that is soldered to the spindle motor board. (See Fig.13.)
  (2) From the bottom side of the DVD traverse mechanism assembly, remove the three screws **G** attaching the spindle motor board. (See Fig.14.)

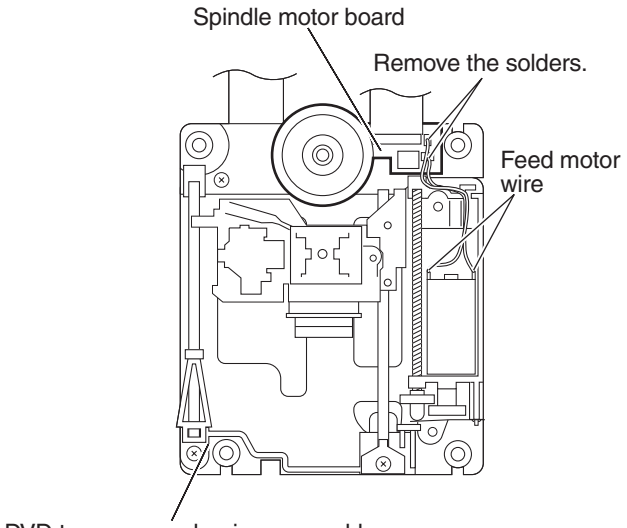


Fig.13

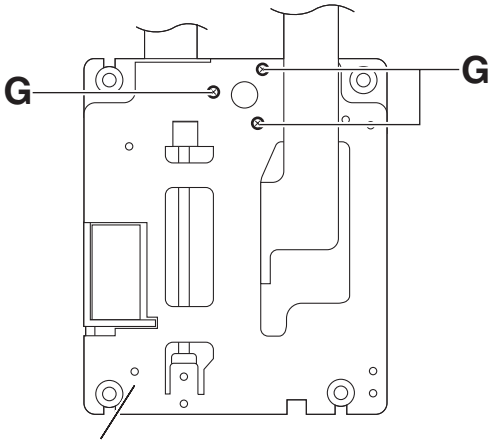


Fig.14

3.3.11 Removing the feed motor (See Figs.15 to 17)

- Remove the DVD servo board.
- Remove the clamper base.
- Remove the DVD traverse mechanism assembly.

(1) From the top side of the DVD traverse mechanism assembly, remove the feed motor wire that is soldered to the spindle motor board. (See Fig.15.)

(2) Remove the two screws **H** attaching the feed holder assembly and then take out the feed holder assembly. (See Fig.15.)

(3) Remove the screw **J** attaching the thrust spring. (See Fig.16.)

(4) Remove the feed gear and lead screw in the direction of the arrow. (See Fig.16.)

(5) Remove the two screws **K** attaching the feed motor. (See Fig.17.)

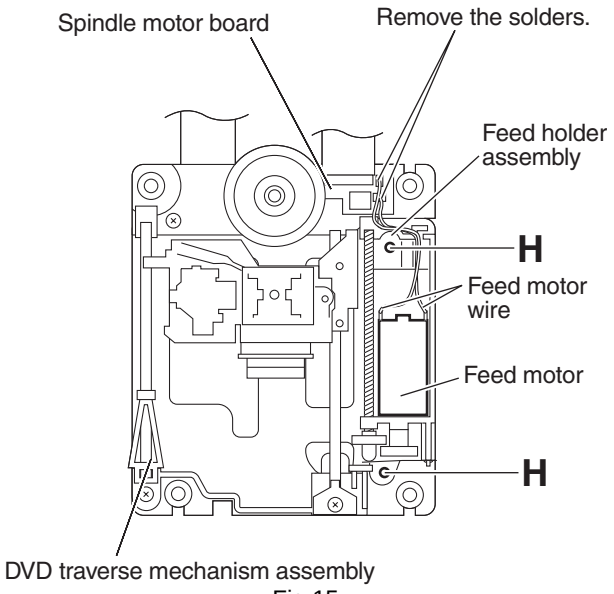


Fig.15

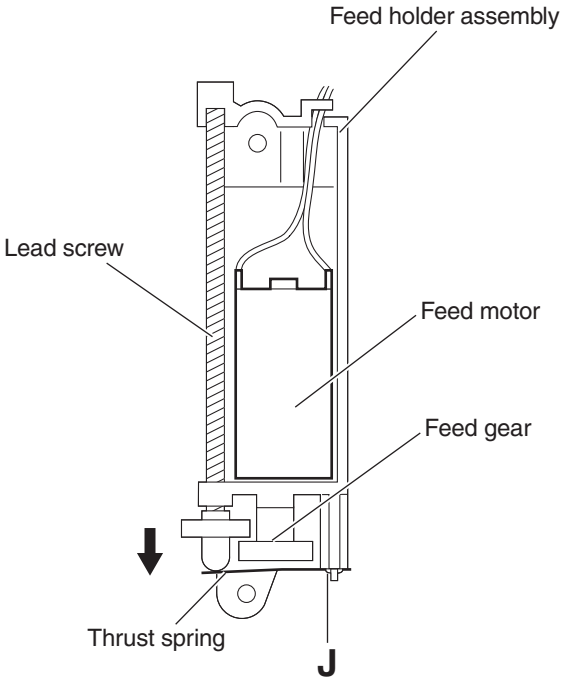


Fig.16

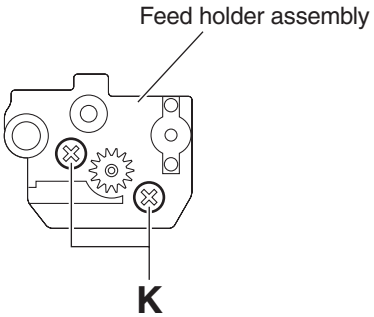


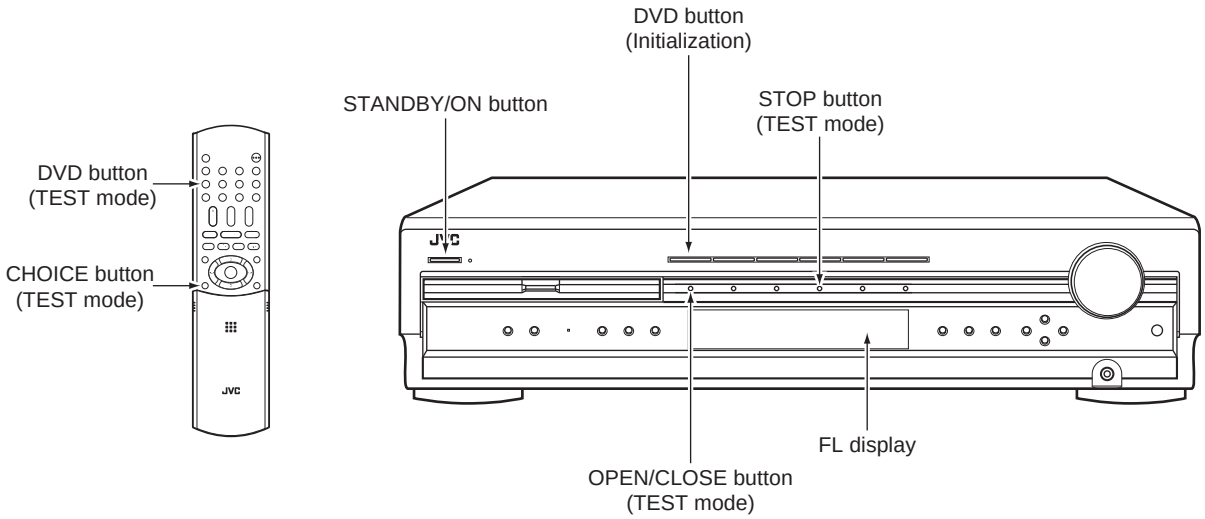
Fig.17

SECTION 4
ADJUSTMENT

4.1 TEST mode (See Fig.1)

(1) Before executing the test mode, press the DVD button on the remote control unit to set the main unit to the DVD mode.
(2) This model is provided with a test mode for use in production control, servicing and repair.
(3) The test mode includes the following four submodes, which are switched over every time the CHOICE button on the remote control unit is pressed.
(4) The test mode is exited when the power is switched on or off.
(5) While holding the STOP and DVD buttons on the main unit, plug the power cord into the wall power outlet.
(6) The opening screen showing the version number is displayed.

The FL display shows "TEST ∗∗". ∗∗: Destination type symbol.



(1) Press the button once: Microcomputer version display mode / The FL display shows the version numbers of the microcomputers in use.
Displayed information: [System MICON] [Front-end (FE) MICON] [Back-end (BE) MICON]
(2) Press the button twice: Display check mode / All FL and LED segments light up.
(3) Press the button three times: Mechanism check mode / The FL display shows "CHECK".
(4) Press the button four times: Front-end check mode / The FL display shows "EXPERT".

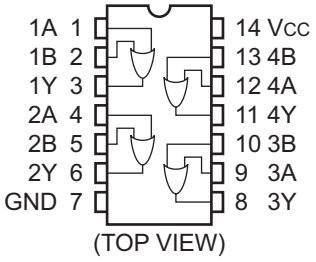
SECTION 5
TROUBLE SHOOTING

This service manual does not describe TROUBLE SHOOTING.

SECTION 6
DESCRIPTION OF MAJOR ICS

6.1 74LCX32MTC-X (IC522) : OR gate

- Pin layout & Block diagram

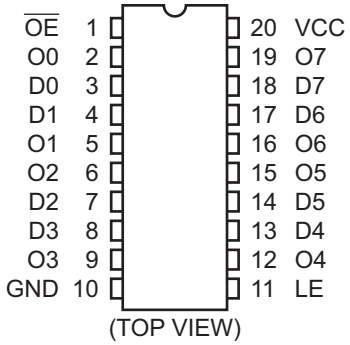


- Truth table

INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	H

6.2 74LCX373MTC-X (IC512,IC513) : Latch

- Pin layout



- Truth table

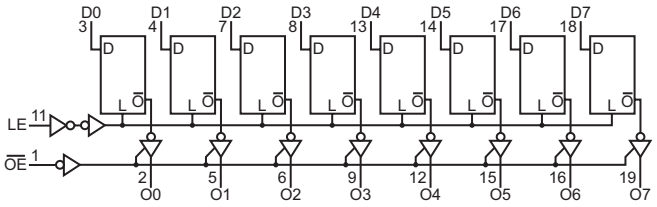
INPUTS			OUTPUT
LE	$\overline{OE}$	Dn	On
X	H	X	Z
H	L	L	L
H	L	H	H
L	L	X	O0

H = HIGH Voltage level
L = LOW Voltage level
Z = High impedance
X = Immaterial
O0 = Previous O0 before HIGH to LOW transition of latch enable

- Pin function

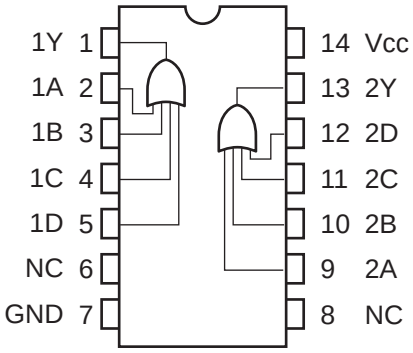
Symbol	Description
D0~D7	Data inputs
LE	Latch enable input
$\overline{OE}$	Output enable input
O0~O7	3-State latch outputs

- Block diagram



6.3 TC74HC4072AF-X (IC611) : OR gate

- Block diagram



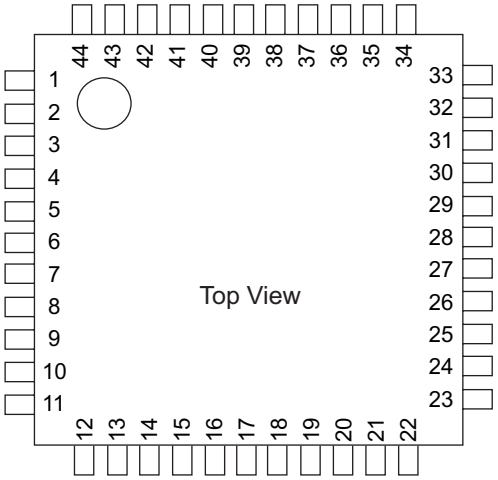
- Truth table

A	B	C	D	Y
H	X	X	X	H
X	H	X	X	H
X	X	H	X	H
X	X	X	H	H
L	L	L	L	L

X : Don't care

6.4 AK4527BVQP (IC601): A/D, D/A converter

• Pin layout



• Pin function

No.	Symbol	I/O	Function
1	SDOS	I	SDTO Source Select Pin (Note 1) "L" : Internal ADC output "H" : DAUX input
2	OSKS	I	Control Mode Select Pin "L" : 3-wire Serial "H" : I2C Bus
3	MIS	-	Soft Mute Pin (Note 1) Connect to GND When this pin goes to "H" soft mute cycle is initialized. When returning to "L" the output mute releases.
4	BICK	I	Audio Serial Data Clock Pin
5	LRCK	I/O	Input Channel Clock Pin
6	SDTI1	I	DAC1 Audio Serial Data Input Pin
7	SDTI2	I	DAC2 Audio Serial Data Input Pin
8	SDTI3	I	DAC3 Audio Serial Data Input Pin
9	SDTO	O	Audio Serial Data Output Pin
10	D,AUX	-	Sub Audio Serial Data Input Pin Connect to GND
11	DFS	-	Double Speed Sampling Mode Pin (Note 1) "L" : Normal Speed "H" : Double Speed
12	DEMI	-	Connect to GND No internal bonding.
13	DEMO	- - -	Zero Input Detect Enable Pin Connect to GND "L" : mode 7 (disable) at parallel mode zero detect mode is selectable by DZFM2-0 bits at serial mode. H : mode 0 (DZF is AND of all six channels)
14	MCKO	-	Output Buffer Power supply Pin 2.7V~5.5V
15	DVDD	I	Digital Power Supply Pin 4.5V~5.5V
16	DVSS	-	De-emphasis Pin 0V
17	$\overline{PD}$	I	Power-Down & Reset Pin When "L" the AK4527B is powered-down and the control registers are reset to default state. If the state of P/S or CAD0-1 changes then the AK4527B must be reset by PDN.
18	XTS	-	Test Pin Connect to GND This pin should be connected to DVSS.
19	ICKS	-	Connect to GND No internal bonding.
20	ADIF	-	Analog Input Format Select Pin Digital Power Supply H : Full-differential input "L" : Single-ended input
21	CAD1	-	Chip Address 1 Pin Connect to GND

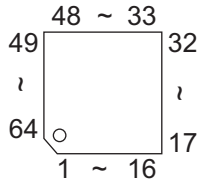
No.	Symbol	I/O	Function
22	CAD0	O	Chip Address 0 Pin Connect to GND
23	LOUT3	O	DAC3 Lch Analog Output Pin
24	ROUT3	O	DAC3 Rch Analog Output Pin
25	LOUT2	O	DAC2 Lch Analog Output Pin
26	ROUT2	O	DAC2 Rch Analog Output Pin
27	LOUT1	O	DAC1 Lch Analog Output Pin
28	ROUT1	O	DAC1 Rch Analog Output Pin
29	LIN-	I	Lch Analog Negative Input Pin
30	LIN+	I	Lch Analog Positive Input Pin
31	RIN-	I	Rch Analog Negative Input Pin
32	RIN+	I	Rch Analog Positive Input Pin
33	VREFL	-	Zero Input Detect 2 Pin (Note 2) Non Connect When the input data of the group 1 follow total 8192LRCK cycles with "0" input data this pin goes to "H".
	OVF	O	Analog Input Overflow Detect Pin (Note 3) This pin goes to "H" if the analog input of Lch or Rch is overflows.
34	VCOM	O	Common Voltage Output PinAVDD/2 Large external capacitor around 2.2uF is used to reduce power-supply noise.
35	VREFH	-	Positive Voltage Reference Input PinAVDD
36	AVDD	-	Analog Power Supply Pin4.5V~5.5V
37	AVSS	-	Analog Ground Pin0V
38	XTI	-	Zero Input Detect 1 Pin (Note 2) Non connect When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data this pin goes to "H".
39	XTO	I	Master Clock Input Pin
40	P1S	-	Parallel / Serial Select Pin "L" : Serial control mode "H" : Parallel control mode
41	$\overline{CS}$	I	Audio Data Interface Format 0 Pin in parallel mode
	CSN	I	Chip select pin in 3-wire serial control mode This pin should be connected to DVDD at I2C bus control mode
42	DIF1	I	Audio Data Interface Format 1 Pin in parallel mode
	SCL/CCLK	I	Control Data Clock Pin in serial control mode I2C = "L" : CCLK(3-wire Serial) I2C = "H" : SCL(I2CBus)
43	LOOP0	I	Loopback Mode 0 Pin in parallel control mode Enables digital loop-back from ADC to 3 DACs.
	SAD/CDTI	I/O	Control Data Input Pin in serial control mode I2C = "L" : CDTI(3-wire Serial) I2C = "H" : SDA(I2CBus)
44	CDTD	I	Loopback Mode 1 Pin (Note 1) Enable all 3 DAC channels to be input from SDTII.

Note:

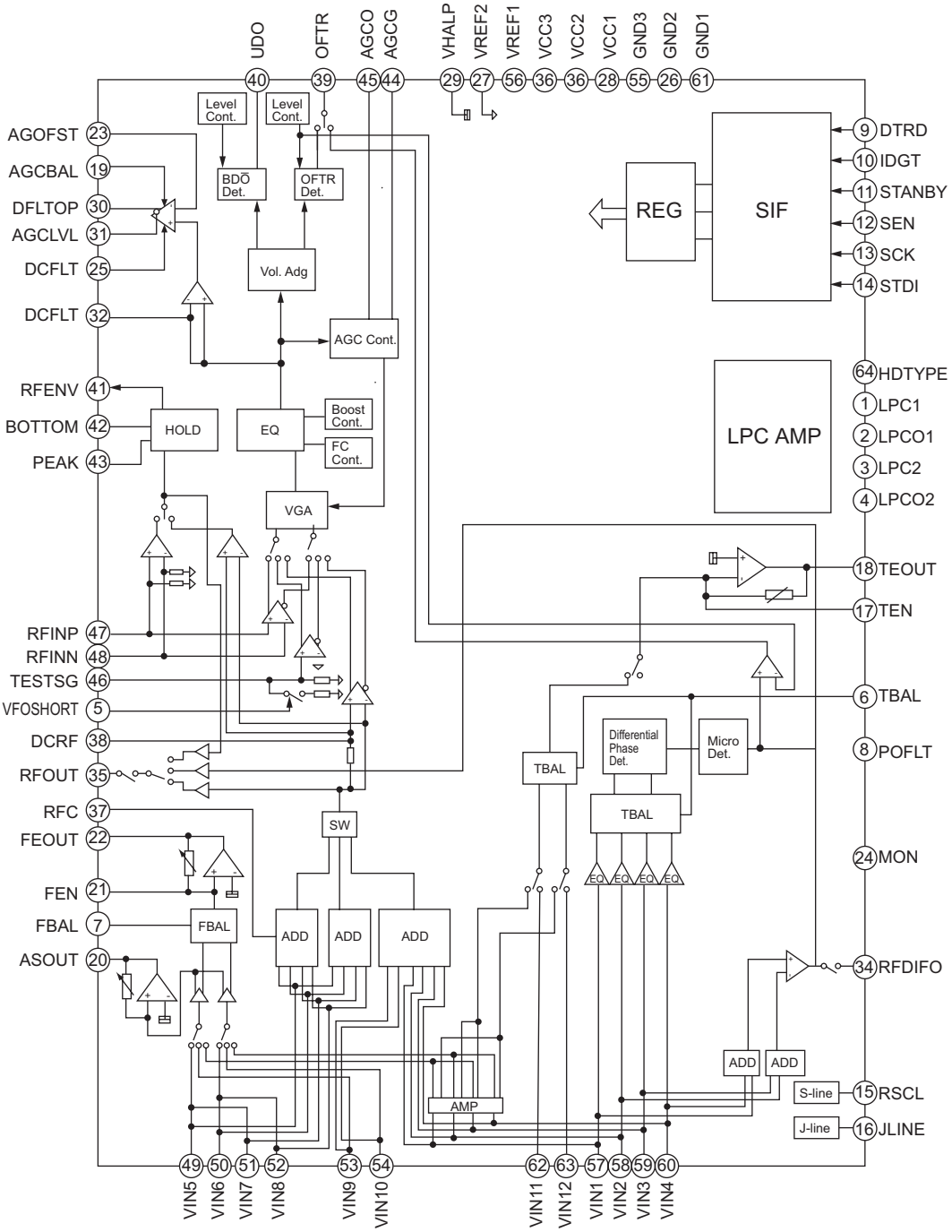
(1) SDOS, SMUTE, DFS, and LOOP1 pins are ORed with register data if P/S = "L".
(2) The group 1 and 2 can be selected by DZFM2-0 bit if P/S = "L" and DZFME = "L".
(3) This pin becomes OVF pin if OVFE bit is set to "1" at serial control mode.
(4) All input pins should not be left floating.

6.5 AN8703FH-V (IC101) : Frontend processor for DVD

- Pin layout



- Block diagram



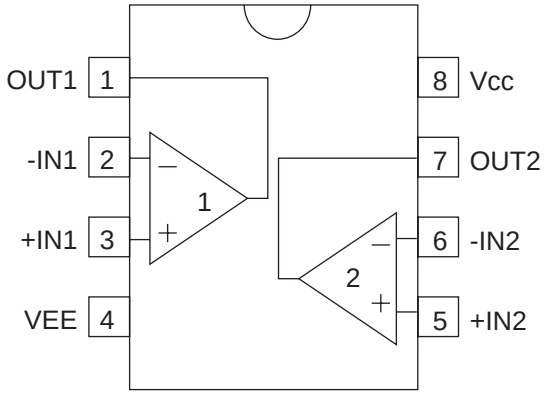
• Pin function

Pin No.	Symbol	Function
1	LPC1	Laser pin input (DVD head)
2	LPCO1	Laser drive output (DVD head)
3	LPC2	Laser in input (CD head)
4	LPCO2	Laser drive output (CD head)
5	VFOSHORT	VFOSHORT control
6	TBAL	Tracking balance control
7	FBAL	Focus balance control
8	POFLT	Track detection threshold level
9	DTRD	Data slice data read signal input (for RAM)
10	IDGT	Data slice address gate signal input (for RAM)
11	STANBY	Standby mode control
12	SEN	SEN (serial data input)
13	SCK	SCK(serial data input)
14	STDI	STDI(serial data I/O)
15	RSCL	Reference current setting
16	JLINE	J-line vurrent setting
17	TEN	Tracking error amplifier inverted input
18	TEOUT	Tracking error signal output
19	AGCBAL	Offset adjustment for DRC-1
20	ASOUT	Full addition signal output
21	FEN	Focus error amplifier inverted input
22	FEOUT	Focus error signal output
23	AGCOFST	Offeset adjustment for DRC-2
24	MON	Monitor
25	AGCLVL	Output amplitude adjustment for DRC
26	GND2	Ground 2
27	VREF2	VREF2 voltage output
28	VCC2	Power supply 2 (5V)
29	VHALF	VHALF voltage output
30	DFLTON	Filter amplifier inverted output
31	DFLTOP	Filter amplifier positive output
32	DCFLT	Filter output capacitance connection
33	GND3	Groud 3
34	RFDIFO	Raidal differntial output
35	RFOUT	RF full-addition amplifier output
36	VCC3	Power supply 3 (3.3V)
37	RFC	Filter for RF-group delay correction amplifier
38	DCRF	DC-cut filter for RF full-addition amplifier
39	OFTR	OFTR output
40	BDO	BDO output
41	RFENV	RF envelope output
42	BOTTOM	Bottom envelope detection filter
43	PEAK	Peak envelope detection filter
44	AGCG	AGC amplifier again control
45	AGCO	AGC amplifier level control

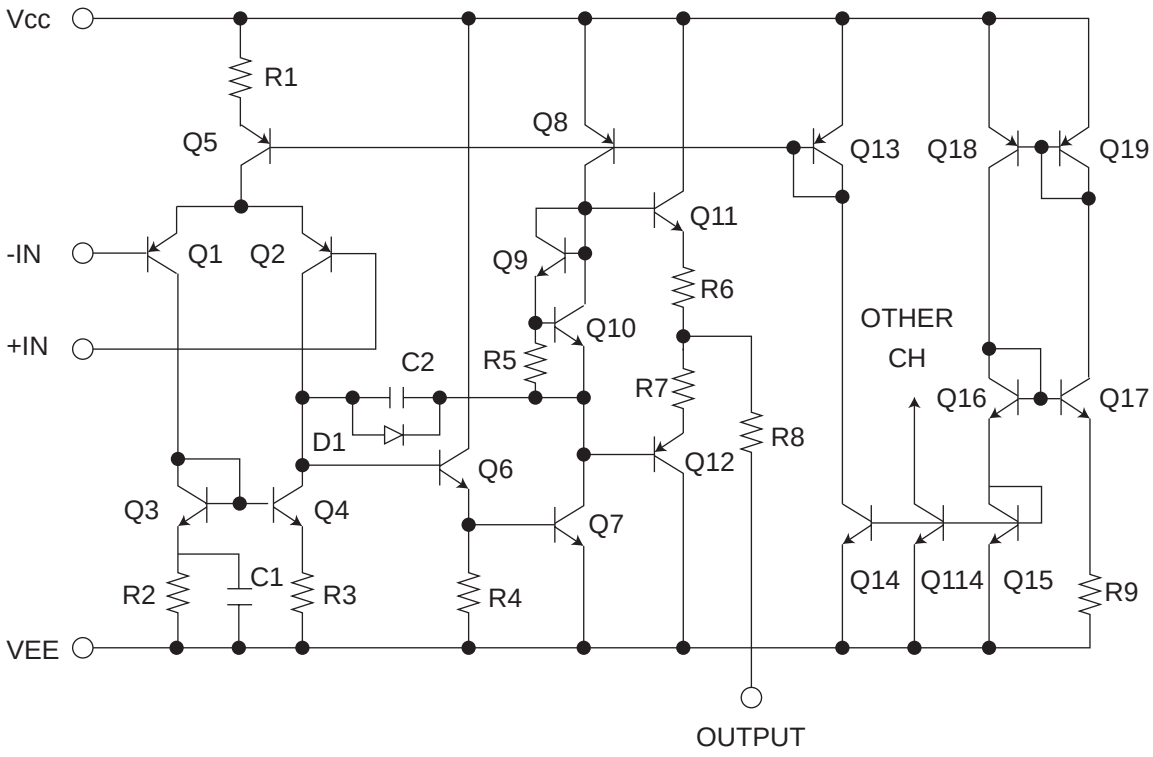
Pin No.	Symbol	Function
46	TESTSG	TEST signal input
47	REFINP	RF signal positive input
48	RFINN	RE signal inverterd input
49	VIN5	Internal four-partition (CD) RF input 1
50	VIN6	Internal four-partition (CD) RF input 2
51	VIN7	Internal four-partition (CD) RF input 3
52	VIN8	Internal four-partition (CD) RF input 4
53	VIN9	Internal four-partition (DVD) RF input 2
54	VIN10	Internal four-partition (DVD) RF input 1
55	VCC1	Power supply 1 (5V)
56	VREF1	VREF1 voltage output
57	VIN1	Internal four-partition (DVD) RF input 1
58	VIN2	Internal four-partition (DVD) RF input 2
59	VIN3	Internal four-partition (DVD) RF input 3
60	VIN4	Internal four-partition (DVD) RF input 4
61	GND1	Groud 1
62	VIN11	3-deam sub (CD) input 2
63	VIN12	3-deam sub (CD) input 1
64	HDTYPE	HD type selection

6.6 BA15218F-XE (IC303,IC602,IC603,IC651,IC652,IC661,IC671,IC672) : Dual operation amplifier

- Pin layout

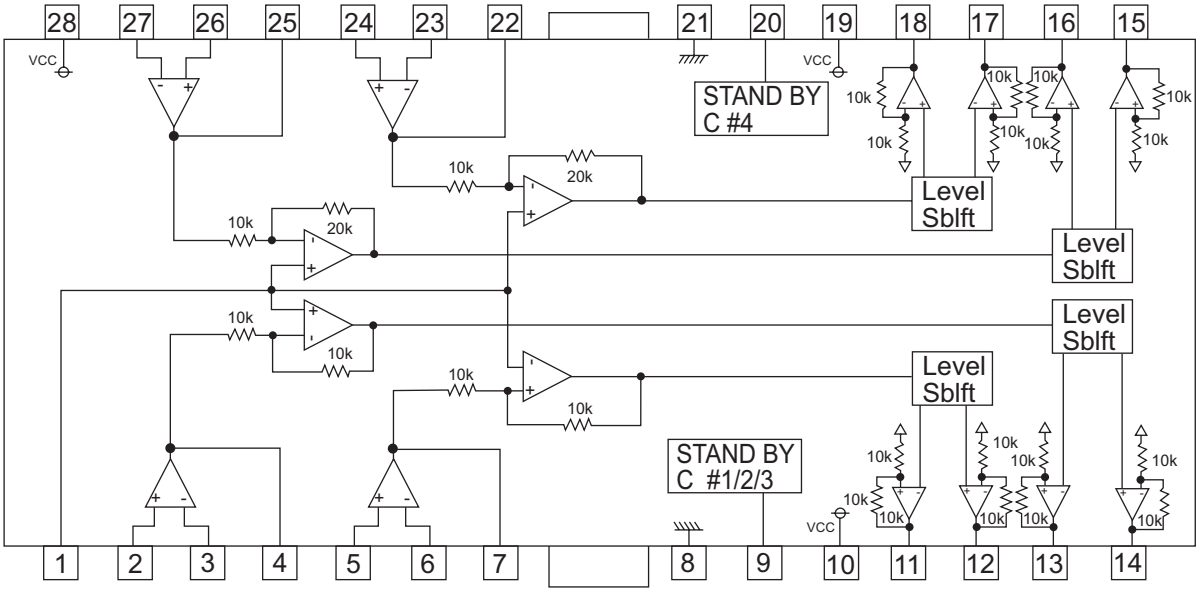


- Block diagram



6.7 BA5983FM-X (IC201) : 4ch driver

- Pin layout & Block diagram

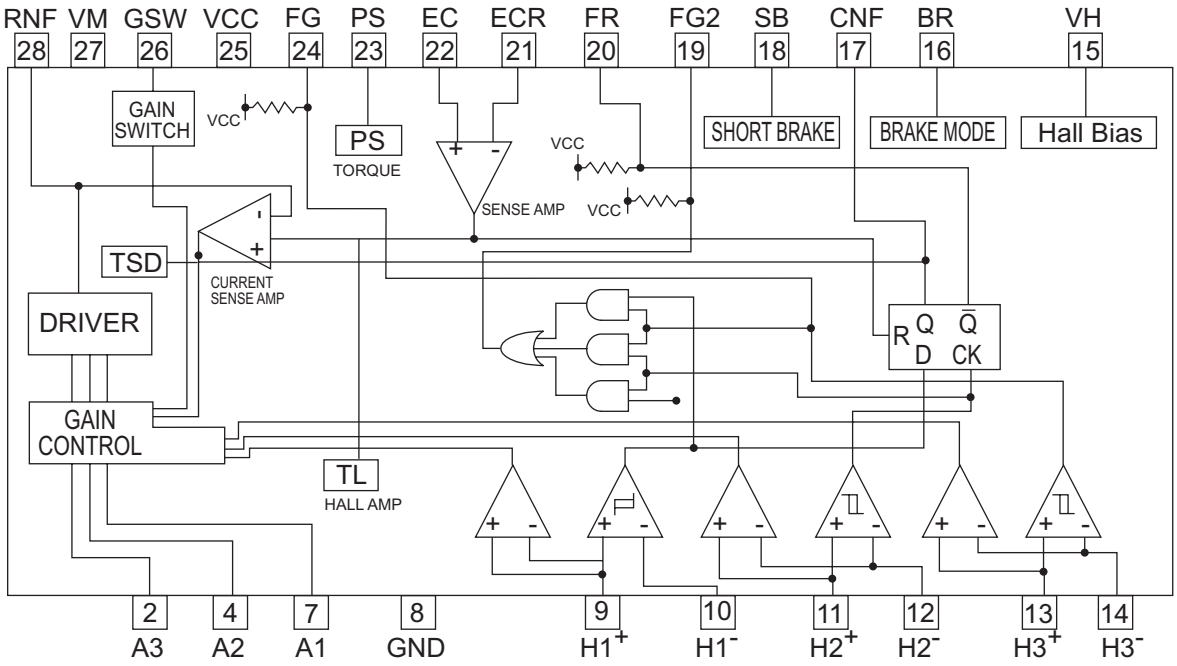


- Pin function

Pin No	Symbol	Function
1	BIAS IN	NC
2	OPIN1(+)	Output3 for motor
3	OPIN1(-)	NC
4	OPOUT1	Output2 for motor
5	OPIN2(+)	NC
6	OPIN2(-)	NC
7	OPOUT2	Output1 for motor
8	GND	GND
9	STBY1	Positive input for hall input Amp1.
10	PowVCC1	Negative input for hall input Amp1.
11	VO2(-)	Positive input for hall input Amp2.
12	VO2(+)	Negative input for hall input Amp2.
13	VO1(-)	Positive input for hall input Amp3.
14	VO1(+)	Negative input for hall input Amp3.
15	VO4(-)	Hall bias terminal
16	VO4(+)	Brake Mode terminal
17	VO3(-)	Capacitor connection pin for phase compensation
18	VO3(+)	Short brake terminal
19	PowVCC2	3Phase synthesized FG signal output termnal
20	STBY2	Rotation detect signal output terminal
21	GND	Torque control standard voltage input terminal
22	OPOUT3	Torque control voltage input terminal
23	OPIN3(-)	START/STOP switch
24	OPIN3(+)	FG signal output terminal
25	OPOUT4	Power supply for driver division
26	OPIN4(-)	Gain switch
27	OPIN4(+)	Power supply for driver division
28	PreVCC	Resistance connection pin for output current sense

6.8 BA6664FM-X (IC251) : Motor driver

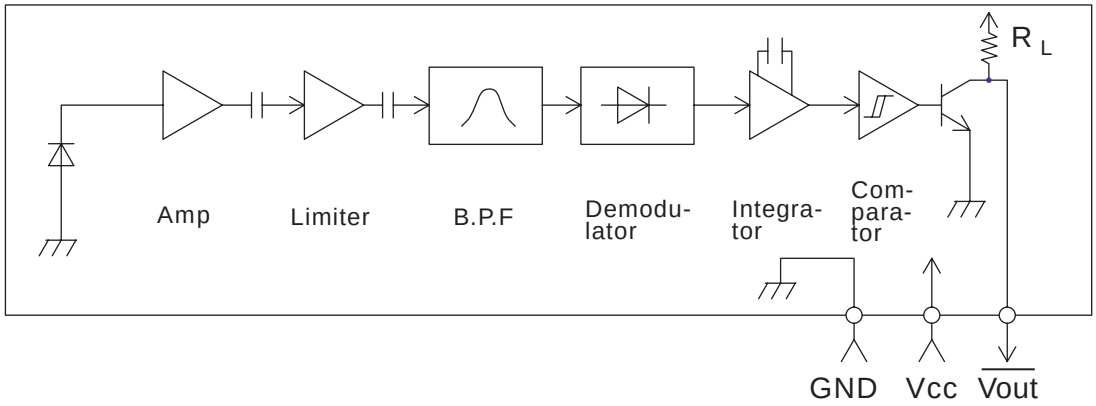
- Pin layout & Block diagram



- Pin function

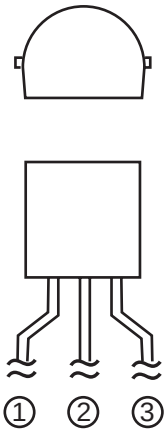
Pin No.	Symbol	Function
1	NC	NC
2	A3	Output3 for motor
3	NC	NC
4	A3	Output2 for motor
5	NC	NC
6	NC	NC
7	A1	Output1 for motor
8	GND	GND
9	H1+	Positive input for hall input Amp1.
10	H1-	Negative input for hall input Amp1.
11	H2+	Positive input for hall input Amp2.
12	H2-	Negative input for hall input Amp2.
13	H3+	Positive input for hall input Amp3.
14	H3-	Negative input for hall input Amp3.
15	VH	Hall bias terminal
16	BR	Brake Mode terminal
17	CNF	Capacitor connection pin for phase compensation
18	SB	Short brake terminal
19	FG2	3Phase synthesized FG signal output termnal
20	FR	Rotation detect signal output terminal
21	ECR	Torque control standard voltage input terminal
22	EC	Torque control voltage input terminal
23	PS	START/STOP switch
24	FG	FG signal output terminal
25	VCC	Power supply for driver division
26	GSW	Gain switch
27	VM	Power supply for driver division
28	RNF	Resistance connection pin for output current sense
FIN	FIN	GND

6.9 GP1UM281X (IC702) : Dual operation amplifier

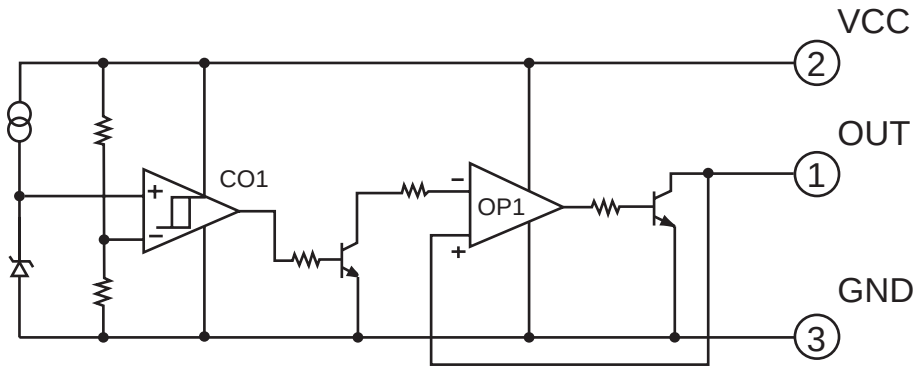


6.10 IC-PST9139-T(IC763) : Regulator

- Terminal layout

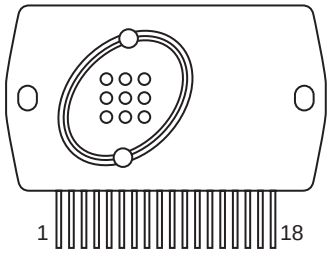


- Block diagram

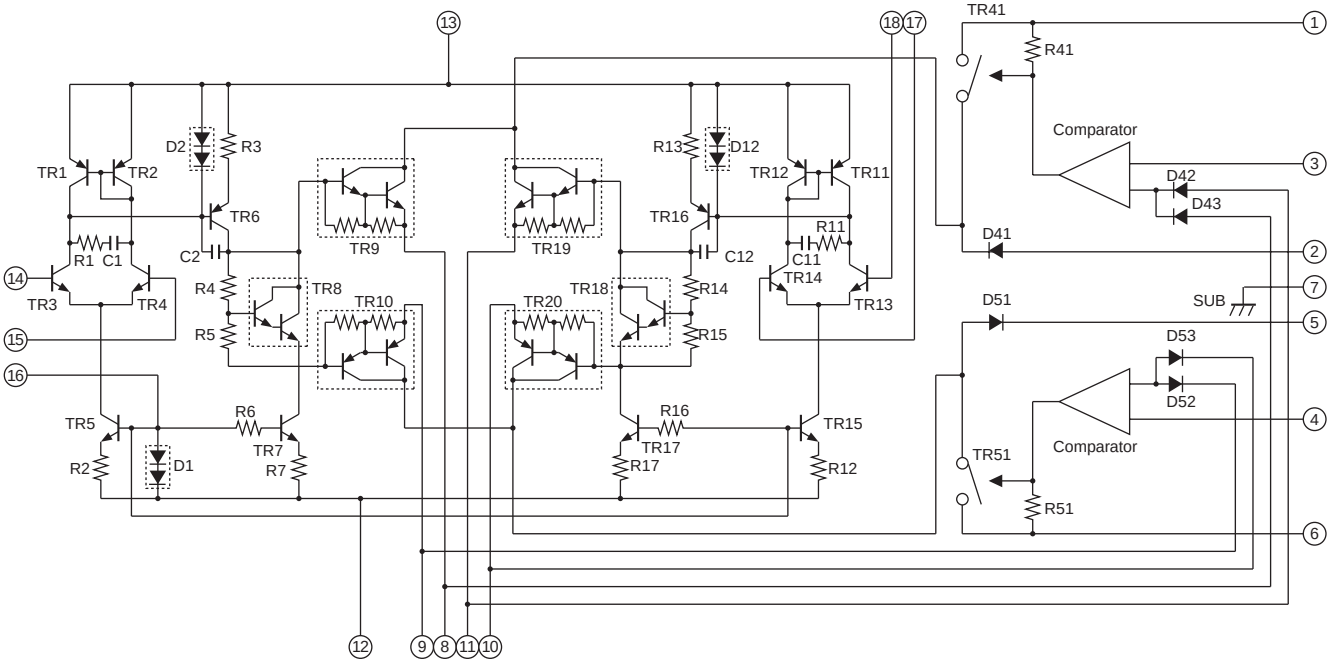


6.11 JCV8007 (IC201) : 2 channel AF power amplifier

- Pin Layout

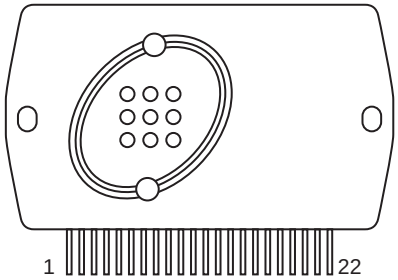


- Block Diagram

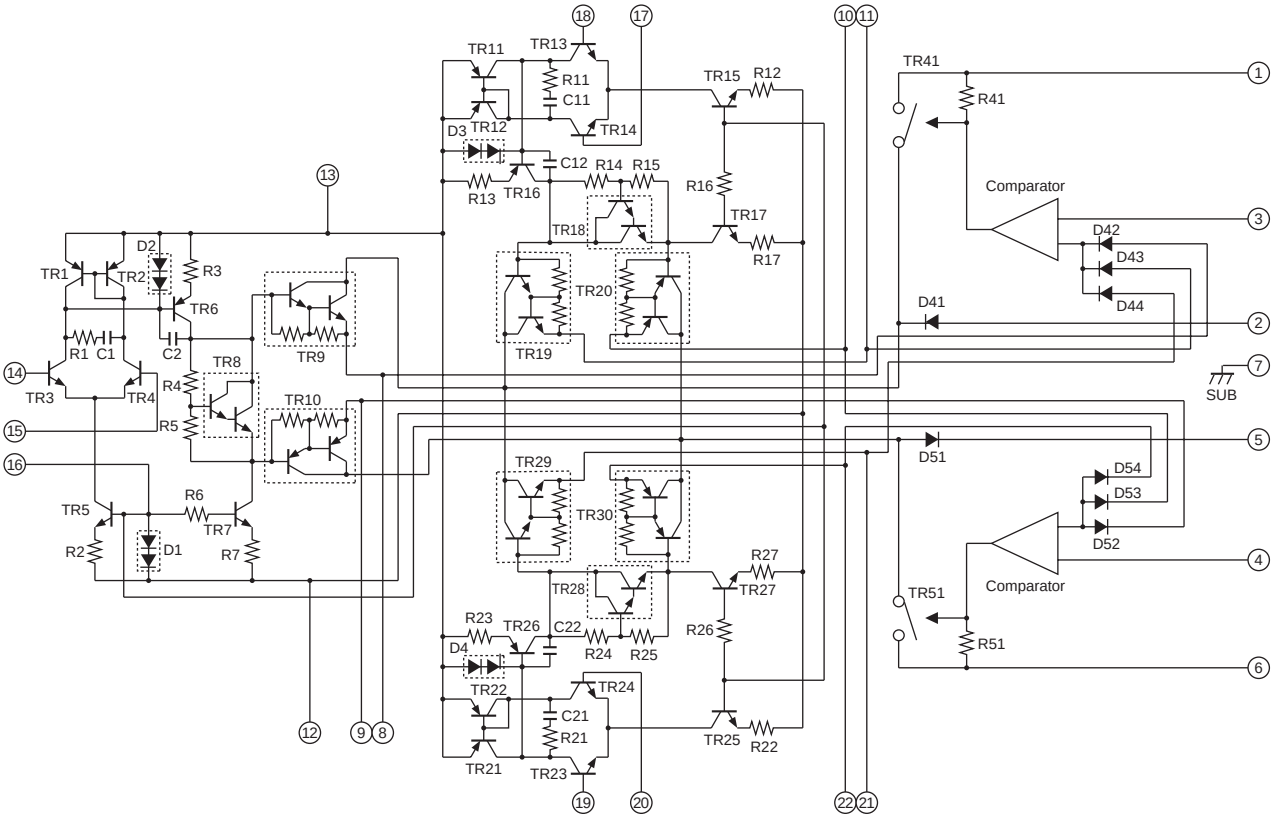


6.12 JCV8008 (IC202) : 3 channel AF power amplifier

- Pin Layout

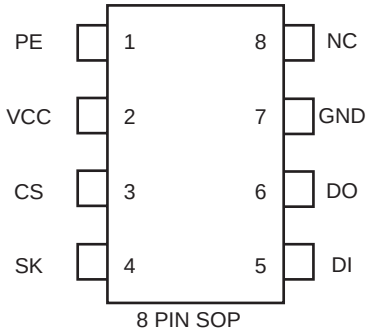


- Block Diagram

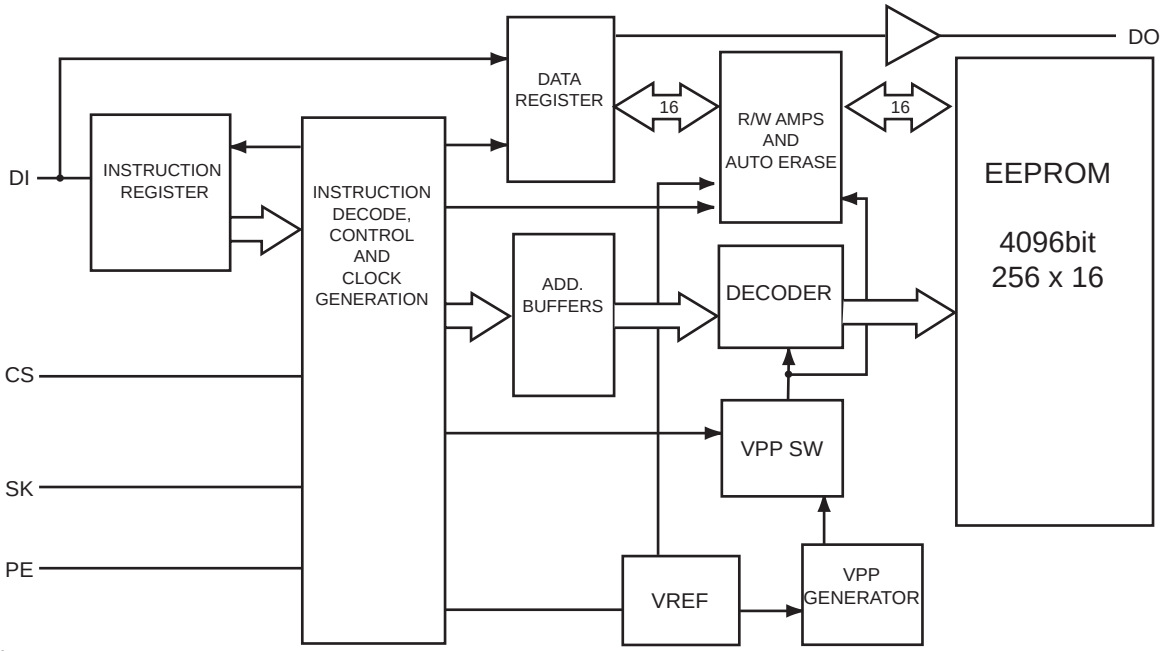


6.13 AK93C65AF-X (IC510) : EEPROM

- Pin layout



- Block diagram



- Pin function

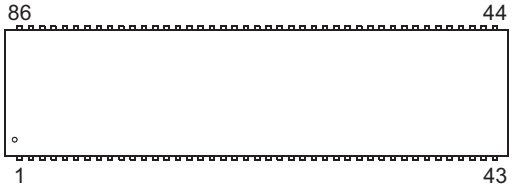
Pin no.	Symbol	Function
1	PE	Program enable (With built-in pull-up resistor)
2	VCC	Power supply
3	CS	Chip selection
4	SK	Cereal clock input
5	DI	Cereal data input
6	DO	Cereal data output
7	GND	Ground
8	NC	No connection

NOTE :

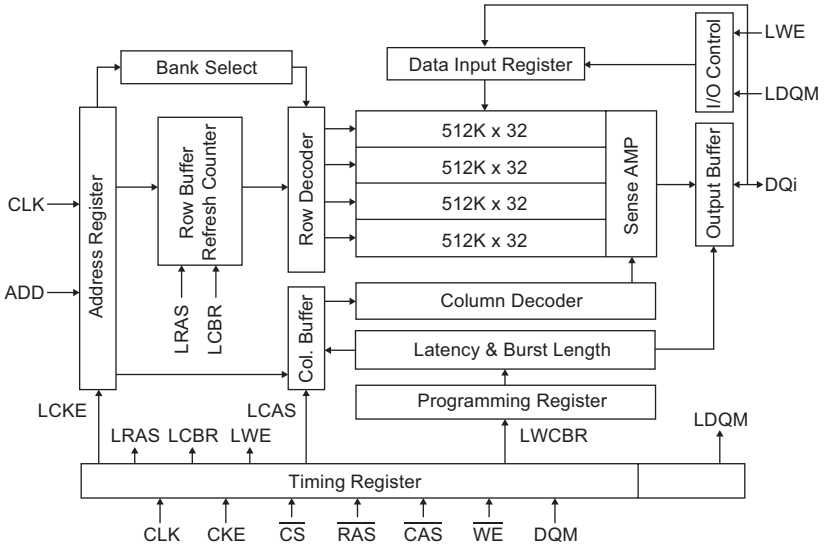
The pull-up resistor of the PE pin is about 2.5Mohm (VCC=5V)

6.14 K4S643232E-TC60 (IC505) : 512K x 32 bit x 4 banks synchronous DRAM

- Pin layout



- Block diagram



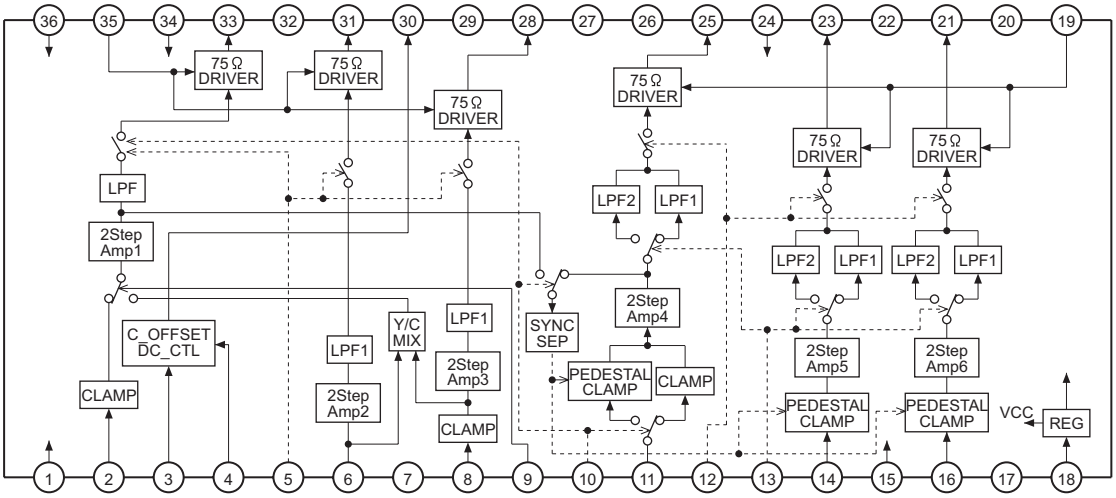
- Pin function

Pin No.	Symbol	Function
1	VDD	Power for the input buffers and core logic.
2	DQ0	Data input/output are multiplexed on the same pin.
3	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
4,5	DQ1,DQ2	Data inputs/outputs are multiplexed on the same pins.
6	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
7,8	DQ3,DQ4	Data inputs/outputs are multiplexed on the same pins.
9	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
10,11	DQ5,DQ6	Data inputs/outputs are multiplexed on the same pins.
12	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
13	DQ7	Data input/output are multiplexed on the same pin.
14	N.C	This pin is recommended to be left no connection on the device.
15	VDD	Power for the input buffers and core logic.
16	DQM0	Makes data output Hi-Z, tSHZ after the clock and masks the output. Blocks data input when DQM active.
17	$\overline{WE}$	Enables write operation and row precharge. Latches data in starting from CAS, WE active.
18	$\overline{CAS}$	Latches column addresses on the positive going edge of the CLK with CAS low. Enables column access.
19	$\overline{RAS}$	Latches row addresses on the positive going edge of the CLK with RAS low. Enables row access & precharge.
20	$\overline{CS}$	Disables or enables device operation by masking or enabling all inputs except CLK, CKE and DQM.
21	N.C	This pin is recommended to be left no connection on the device.
22,23	BA0,BA1	Selects bank to be activated during row address latch time. Selects bank for read/write during column address latch time.

Pin No.	Symbol	Function
24,25~27	A10,A0 - A2	Row/column addresses are multiplexed on the same pins. Row address : RA0 ~ RA10, Column address : CA0 ~ CA7
28	DQM2	Makes data output Hi-Z, tSHZ after the clock and masks the output. Blocks data input when DQM active.
29	VDD	Power for the input buffers and core logic.
30	N.C	This pin is recommended to be left no connection on the device.
31	DQ16	Data input/output are multiplexed on the same pin.
32	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
33,34	DQ17,DQ18	Data inputs/outputs are multiplexed on the same pins.
35	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
36,37	DQ19,DQ20	Data inputs/outputs are multiplexed on the same pins.
38	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
39,40	DQ21,DQ22	Data inputs/outputs are multiplexed on the same pins.
41	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
42	DQ23	Data input/output are multiplexed on the same pin.
43	VDD	Power for the input buffers and core logic.
44	VSS	Ground for the input buffers and core logic.
45	DQ24	Data input/output are multiplexed on the same pin.
46	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
47,48	DQ25,DQ26	Data inputs/outputs are multiplexed on the same pins.
49	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
50,51	DQ27,DQ28	Data inputs/outputs are multiplexed on the same pins.
52	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
53,54	DQ29,DQ30	Data inputs/outputs are multiplexed on the same pins.
55	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
56	DQ31	Data input/output are multiplexed on the same pin.
57	N.C	This pin is recommended to be left no connection on the device.
58	VSS	Ground for the input buffers and core logic.
59	DQM3	Makes data output Hi-Z, tSHZ after the clock and masks the output. Blocks data input when DQM active.
60~66	A3 - A9	Row/column addresses are multiplexed on the same pins. Row address : RA0 - RA10, Column address : CA0 - CA7
67	CKE	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disables input buffers for power down mode.
68	CLK	Active on the positive going edge to sample all inputs.
69,70	N.C	This pin is recommended to be left no connection on the device.
71	DQM1	Makes data output Hi-Z, tSHZ after the clock and masks the output. Blocks data input when DQM active.
72	VSS	Ground for the input buffers and core logic.
73	N.C	This pin is recommended to be left no connection on the device.
74	DQ8	Data input/output are multiplexed on the same pin.
75	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
76,77	DQ9,DQ10	Data inputs/outputs are multiplexed on the same pins.
78	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
79,80	DQ11,DQ12	Data inputs/outputs are multiplexed on the same pins.
81	VDDQ	Isolated power supply for the output buffers to provide improved noise immunity.
82,83	DQ13,DQ14	Data inputs/outputs are multiplexed on the same pins.
84	VSSQ	Isolated ground for the output buffers to provide improved noise immunity.
85	DQ15	Data input/output are multiplexed on the same pin.
86	VSS	Ground for the input buffers and core logic.

6.15 LA73054-X (IC401) : Video driver

- Pin layout & Block diagram

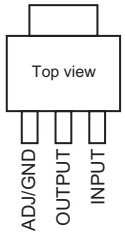


- Pin function

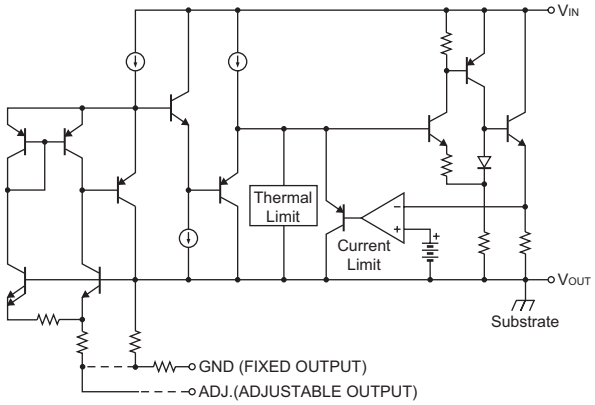
Pin No.	Symbol	I/O	Function
1	VCC1	-	VCC except for 75ohm driver
2	COMPOSITE.IN	I	Input composite
3	SQUEEZE.SW	I	Selecting squeeze mode
4	LETTER-BOX.SW	I	Selecting letter-box mode
5	MUTE-SW-1	I	Composite/S signal mute selection
6	C-IN	I	Input Chroma signal
7	GND11	-	Composite/S GND except for 75ohm driver
8	Y-IN-1	I	Input Y signal
9	YC-MIX.SW	I	Selecting of doing Y/C-MIX or not
10	SIGNAL-IN.SW	I	Selection of a kind of signal
11	Y-IN-2	I	Input component Y or baseband signal
12	MUTE-SW-2	I	Component signal mute selection
13	LPF.SW	I	Selection of a kind of component LPF
14	CB.IN	I	Input component or baseband signal
15	AMP.SW-2	I	Selecting amplifier gain for component signal
16	CR.IN	I	Input component or baseband signal
17	GND12	-	Component GND except for 75ohm driver
18	REG	O	Capacitor terminal for regulator
19	DRIVE.SW-2	I	2drive/1drive select for component signal
20	GND26	-	CR-GND for 75ohm driver
21	CR.OUT	O	75ohm driver output of pin16 input
22	GND25	-	CB-OUT for 75ohm driver
23	CB.OUT	O	75ohm driver output of pin14 input
24	VCC22	-	Component Vcc for 75ohm driver
25	Y-OUT-2	O	75ohm driver output of pin11 input
26	GND24	-	Component Y out for 75ohm driver
27	GND23	-	Y out for 75ohm driver
28	Y-OUT-1	O	75ohm driver output of pin8 input
29	GND22	-	Chroma out for 75ohm driver
30	C-DC.OUT	O	DC voltage output for S1,S2
31	C-OUT	O	75ohm driver output of pin6 input
32	GND21	-	Composite out for 75ohm driver
33	COMPOSITE-OUT	O	75ohm driver output of pin2 input
34	VCC21	-	Composite/S Vcc for 75ohm driver
35	DRIVE.SW-1	I	2drive/1drive select for composite/S signal
36	AMP.SW-1	I	Selecting amplifier gain for composite/S signal

6.16 LM1117MP1.8-X (IC511) : Regulator

- Pin layout

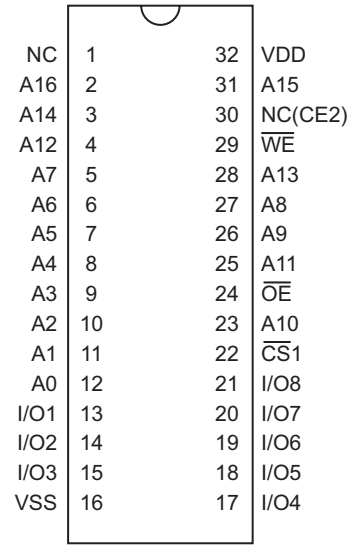


- Block diagram

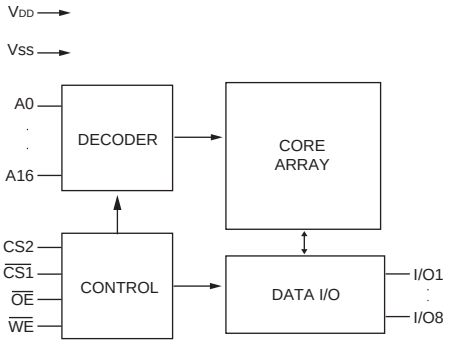


6.17 LP61L1024S-12-X (IC641) : SRAM

- Pin layout



- Block diagram

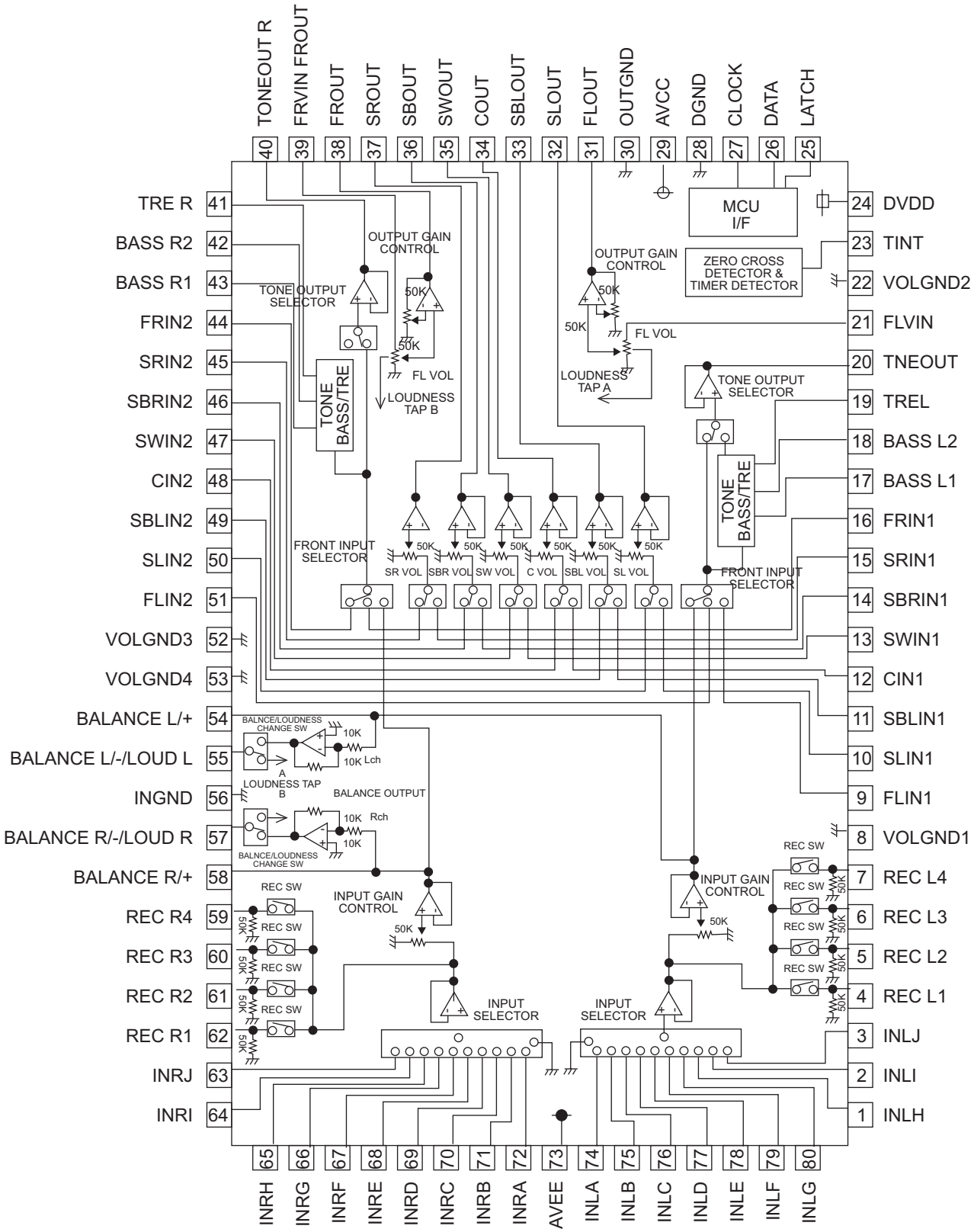


- Pin function

SYMBOL	DESCRIPTION
A0 - A16	Address Input
I/O1 - I/O8	Data Input/Output
$\overline{CS1}$, CS2	Chip Select Inputs
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
VDD	Power Supply
Vss	Ground
NC	No Connection

6.18M61516FP (IC301) : Sound controller

- Pin layout & Block diagram

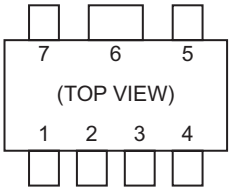


• Pin function

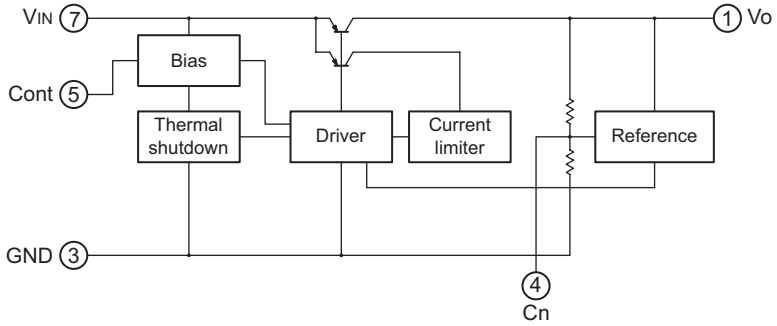
Pin No.	Symbol	Function
1~3	INLH,INLI,INLJ	Lch input
4~7	REC L1,REC L2,REC L3,REC L4	REC output
8	VOLGND1	Analog GND for vol.
9~12	FLIN1,SLIN1,SBLIN1,CIN1	FLch,SLch,SBLch,Cch input
13~16	SWIN1,SBRIN1,SRIN1,FRIN1	SWch,SBRch,SRch,FRch input
17,18	BASS L1,BASS L2	Tone path frequency characteristic setup
19	TRE L	Treble frequency characteristic setup
20	TONEOUT L	Tone output
21	FLVIN	FL vol. input
22	VOLGND2	Analog GND for vol.
23	TIM1	Timer setup
24	DVDD	Internal logic circuit Power supply terminal
25,26,27	LATCH,DATA,CLOCK	Latch,Data,Clock input for serial data transmission
28	DGND	Internal logic circuit GND terminal
29	AVCC	Internal analog cicuit power supply terminal (+)
30	OUTGND	analog GND
31~34	FLOUT,SLOUT,SBLOUT,COUT	FLch,SLch,SBLch,Cch output
35~38	SWOUT,SBROUT,SROUT,FROUT	SWch,SBRch,SRch,FRch output
39	FRVIN	FR vol.input
40	TONEOUT R	Tone output
41	TRE R	Treble frequency characteristic setup
42,43	BASS R1,BASS R2	Tone path frequency characteristic setup
44~47	FRIN2,SRIN2,SBRIN2,SWIN2	FRch,SRch,SBRch,SWch input
48~51	CIN2,SBLIN2,SLIN2,FLIN2	Cch,SBLch,SLch,FLch input
52,53	VOLGND3,VOLGND4	Analog GND for vol.
54	BALANCE L/+	Lch balance output for ADC
55	BALANCE L/- LOUD L	Lch loudness frequency setup
56	INGND	Analog GND
57	BALANCE R/+	Rch balance output for ADC
58	BALANCE R/- LOUD R	Rch loudness frequency setup
59~62	REC R1,REC R2,REC R3,REC R4	REC input
63~66	INRJ,INRI,INRH,INRG	Rch input
67~70	INRF,INRE,INRD,INRC	Rch input
71,72	INRB,INRA	Rch input
73	AVEE	Internal analog circuit power supply terminal (-)
74~77	INLA,INLB,INLC,INLD	Lch input
78~80	INLE,INLF,INLG	Lch input

6.19MM1563DF-X (IC615) : Regulator

- Pin layout



- Block diagram

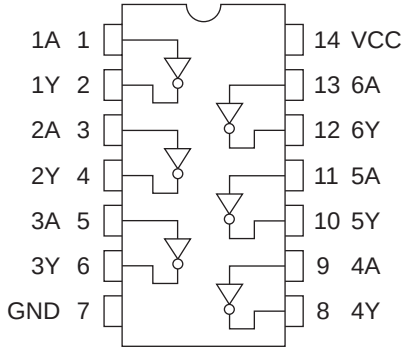


- Pin function

Pin No.	Symbol	Function
1	Vo	Output pin
2	NC	Not connect
3	GND	Ground
4	Cn	Noise decrease pin
5	CONT	Control pin CONT: H → Output: ON; CONT: L → Output: OFF
6	Sub	Substrate pin, The 6pin must be connected to GND.
7	VIN	Input pin

6.20 MM74HCU04SJ-X (IC621) : Inverter

- Pin Layout

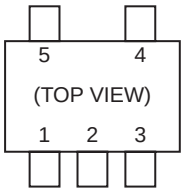


- Truth table

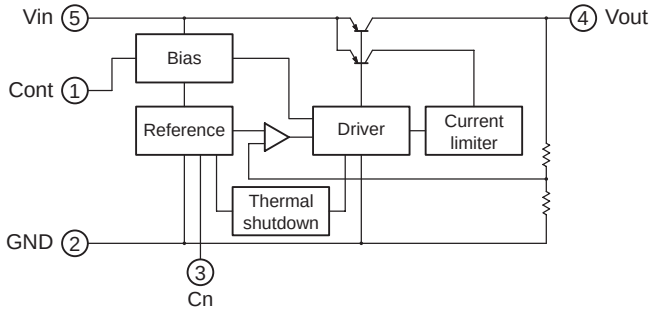
A	Y
L	H
H	L

6.21 MM1613DN-X (IC682) : Regulator

• Pin layout



• Block diagram

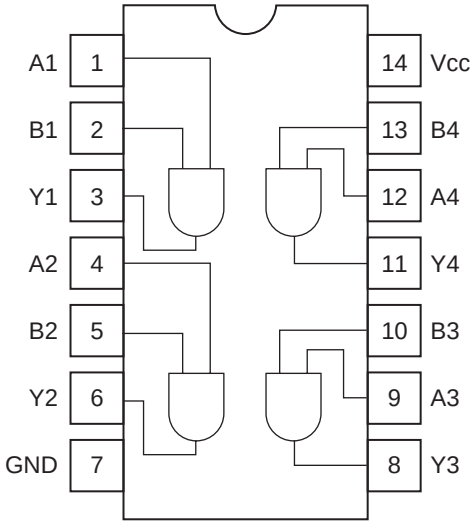


• Pin function

Pin No.	Symbol	Function
1	Cont	ON/OFF Control pin Cont: H = ON, L = OFF Cont pin must be connected with VIN pin, if it is not used.
2	GND	Ground
3	Cn	Noise decrease pin, Connecting 0.01uF capacitor can decrease output noise.
4	Vout	If the noise decrease capacitor is not connected, the pin may be influenced by outside noise. Output pin, The capacitor must be connected with output pin more than 1uF.
5	Vin	Input pin The capacitor is required to connect with input pin more than 1uF.

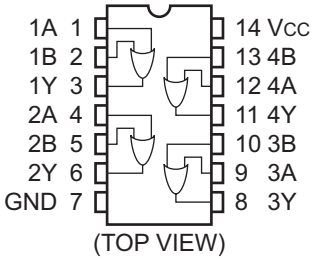
6.22 MM74HC08SJ-X (IC612) : Quad. 2-input AND gates

• Pin layout & Block diagram



6.23 MM74HCT32MTC-X (IC521) : OR gate

• Pin layout & Block diagram

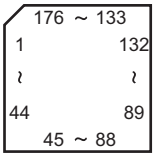


• Truth table

INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	H

6.24 MN103S26EGA (IC301) : Optical disc controller

- Pin layout



- Pin function

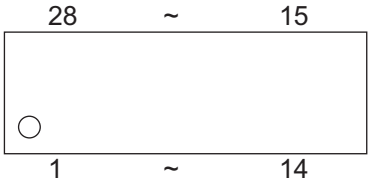
Pin No.	Symbol	I/O	Function
1	NINT0	O	System control interruption 0
2	NINT1	O	System control interruption 1
3	VDD3	-	Power supply (3.3V)
4	VSS	-	Ground
5	NINT2	O	System control interruption 2
6	WAITODC	O	System control wait control
7	NMRST	-	System control reset (Not connect.)
8	DASPST	-	DASP signal initializing
9~17	CPUADR17 - 9	I	System control address
18	VDD18	-	Power supply (1.8V)
19	VSS	-	Ground
20	DRAMVDD18	-	Connect to VDD18
21	DRAMVSS	-	Connect to VSS
22~30	CPUADR8 - 0	I	System control address
31	VDD3	-	Power supply (3.3V)
32	VSS	-	Ground
33	DRAMVDD3	-	Connect to VDD3
34	NCS	I	System control chip select
35	NWR	I	System control write
36	NRD	I	System control read
37~44	CPUDT7 - 0	I/O	System control data
45	CLKOUT1	-	Not connect.
46	MMOD	I	Connect to VSS
47	NRST	I	System reset
48	MSTPOL	I	Master terminal polarity switch input (Connect to VSS.)
49	SCLOCK	-	Not connect.
50	SDATA	-	Not connect.
51	OFTR	I	Off track signal input
52	BDO	I	RF dropout/BCA data of making to binary
53~56	PWM1 - 4	-	Not connect.
57	VDD3	-	Power supply (3.3V)
58	DRAMVDD18	-	Connect to VDD18
59	DRAMVSS	-	Connect to VSS
60	VSS	-	Ground
61~64	PWM5 - 8	-	Not connect.
65	TBAL	O	Tracking balance adjustment output
66	FBAL	O	Focus balance adjustment output
67	TRSDRV	O	Traverse drive output
68	SPDRV	O	Spindle drive output
69	FG	I	Motor FG input
70	TILTP	-	Not connect.

Pin No.	Symbol	I/O	Function
71	TILT	-	Not connect.
72	TILTN	-	Not connect.
73	TX	-	Not connect.
74	DTRD	-	Not connect.
75	IDGT	-	Not connect.
76	VDD18	-	Power supply (1.8V)
77	VSS	-	Ground
78	VDD3	-	Power supply (1.8V)
79	OSCI1	I	16.9MHz clock input
80	OSCO1	-	Not connect.
81	VSS	-	Ground
82	TSTSG	O	Calibration signal
83	VFOSHORT	O	VFO short output
84	JLINE	O	J-line setting output
85	AVSS	-	Analog ground
86	ROUT	-	Not connect.
87	LOUT	-	Not connect.
88	AVDD	-	Analog power supply
89	VCOF	I	JFVCO control voltage
90	TRCRS	I	Input signal for track cross formation
91	CMPIN	-	Not connect.
92	LPFOUT	-	Not connect.
93	LPFIN	I	Pull-up to VHALF
94	AVSS	-	Analog ground
95	HPFOUT	-	Not connect.
96	HPFIN	I	HPF input
97	CSLFLT	I	Pull-up to VHALF
98	RFOIF	-	Not connect.
99	AVDD	-	Analog power supply
100	PLFLT2	I	Connect to capacitor 2 for PLL
101	PLFLT1	I	Connect to capacitor 1 for PLL
102	AVSS	-	Analog ground
103	RVI	I	Connect to resistor for VREF reference current source
104	VREFH	I	Reference voltage input (2.2V)
105	PLPG	-	Not connect.
106	VHALF	I	Reference voltage input (1.65V)
107	DSLF2	I	Connect to capacitor 2 for DSL
108	DSLF1	I	Connect to capacitor 1 for DSL
109	AVDD	-	Analog power supply
110	NARF	I	Equivalence RF-
111	ARF	I	Equivalence RF+
112	JITOUT	O	Output for jitter signal monitor
113	AVSS	-	Analog ground
114	DAC0	O	Tracking drive output
115	DAC1	O	Focus drive output
116	AVDD	-	Analog power supply
117	AD0	I	Focus error input
118	AD1	I	Phase difference/3 beams tracking error

Pin No.	Symbol	I/O	Function
119	AD2	I	AS: Full adder signal
120	AD3	I	RF envelope input
121	AD4	I	DVD laser current control terminal
122	AD5	I	Tracking drive IC input offset
123	AD6	I	CD laser current control terminal
124	TECAPA	-	Not connect.
125	VDD3	-	Power supply (3.3V)
126	VSS	-	Ground
127~130	MONI0 - 3	O	Internal goods title monitor (Connect to TP306 - TP309)
131	NEJECT	I	Eject detection
132	NTRYCTL	I	Tray close detection
133	NDASP	I/O	ATAPI drive active / Slave connection I/O
134	NCS3FX	I	ATAPI host chip select (Not connect.)
135	NCS1FX	I	ATAPI host chip select (Not connect.)
136	DA2	I/O	ATAPI host address
137	DA0	I/O	ATAPI host address (Not connect.)
138	NPDIAG	I/O	ATAPI slave master diagnosis input
139	DA1	I/O	ATAPI host address (Not connect.)
140	NIOCS16	-	ATAPI output of selection of host data bus width (Not connect.)
141	INTRQ	O	ATAPI host interruption output
142	NDMACK	I	ATAPI host DMA response (Not connect.)
143	VDD3	-	Power supply (3.3V)
144	VSS	-	Ground
145	IORDI	-	ATAPI host ready output (Not connect.)
146	NIORD	I	ATAPI host read (Not connect.)
147	NIOWR	I/O	ATAPI host write
148	DMARQ	-	ATAPI host DMA request (Not connect.)
149~151	HDD15,HDD0,HDD14	I/O	ATAPI host data 15,0,14
152	VDD18	-	Power supply (1.8V)
153	PO	-	Connect to ground
154	UATASEL	I	Connect to VSS
155	VSS	-	Ground
156	VDD3	-	Power supply (3.3V)
157~159	HDD1,HDD13,HDD2	I/O	ATAPI data 1,13,2
160161	HDD12,HDD3	I/O	ATAPI data 12,3
162	VDD3	-	Power supply (3.3V)
163	VSS	-	Ground
164~166	HDD11,HDD4,HDD10	I/O	ATAPI data 11,4,10
167168	HDD5,HDD9	I/O	ATAPI data 5,9
169	VDD3	-	Power supply (3.3V)
170	VSS	-	Ground
171~173	HDD6,HDD8,HDD7	I/O	ATAPI data 6,8,7
174	VDDH	-	Reference power supply for ATAPI (5.0V)
175	NRESET	I	ATAPI host reset
176	MASTER	I/O	ATAPI master / Slave selection

6.25 MN35505-X (IC901,IC931,IC961) : DAC

- Terminal layout

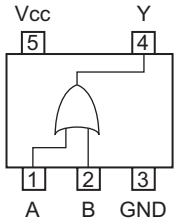


- Pin function

Pin No.	Symbol	I/O	Function
1	M5	I	Control signal for DAC
2	DIN	I	Digital data input
3	LRCK	I	L and R clock for DAC
4	BCK	I	Bit clock for DAC
5	M3	I	Control signal for DAC
6	DVDD2	-	Power supply
7	CKO	-	Non connect
8	DVSS2	-	Connect to ground
9	M2	I	Control signal for DAC
10	M1	I	Control signal for DAC
11	OUT1C	O	Analog output 1
12	AVDD1	-	Power supply
13	OUT1D	O	Analog output 1
14	AVSS1	-	Connect to GND
15	AVSS2	-	Connect to GND
16	OUT2D	O	Analog output 2
17	AVDD2	-	Power supply
18	OUT2C	O	Analog output 2
19	M9	I	Control signal for DAC
20	DVSS2	-	Connect to GND
21	XOUT	-	Non connect
22	XIN	-	Non connect
23	VCOF	I	VCO Frequency
24	DVDD1	-	Power supply D+5V
25	M7	-	Connect to GND
26	M8	-	Connect to GND
27	M4	I	Control signal for DAC
28	M6	I	Clock for control signal

6.26 NC7ST32P5-X (IC683) : 2-Input OR Gate

- Pin layout & Block diagram



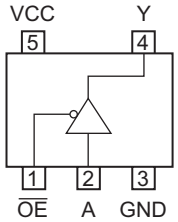
- Truth table

INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	H

H : HIGH logic level
L : LOW logic level

6.27 NC7SZ125P5-X (IC523) : Bus buffer gate with 3-state output

- Pin layout & Block diagram



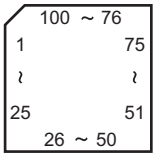
- Truth table

INPUTS		OUTPUT
$\overline{OE}$	B	Y
L	H	H
L	L	L
H	X	Z

X: Don't care
Z: High impedance

6.28 MN102L62GLF3 (IC401) : Unit CPU

- Pin layout



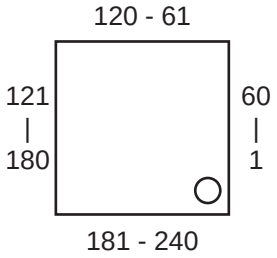
- Pin function

Pin No.	Symbol	I/O	Function
1	WAIT	I	Micro computer wait signal input
2	RE	O	Read enable
3	/SPMUTE	O	Spindle muting output to IC251
4	WEN	O	Write enable
5	/LMMUTE	-	Not connect
6	CS1	O	Chip select for ODC
7	CS2	-	Chip select for ZIVA (Not connect.)
8	HDTYPE	O	HD TYPE selection
9	/DRVMUTE	O	Driver mute
10	SBRK	O	SP motor brake control
11	LSIRST	O	LSI reset
12	WOR0	O	Bus selection input
13-16	A0-A3	O	Address bus (0-3) for CPU
17	VDD	-	Power supply
18	SYSCLK	-	System clock signal output (Not connect.)
19	VSS	-	Ground
20	XI	-	Not use (Connect to VSS)
21	XO	-	Not connect
22	VDD	-	Power supply
23	OSCI	I	Clock signal input (13.5MHz)
24	OSCO	O	Clock signal output (13.5MHz) (Not connect.)
25	MODE	I	CPU mode selection input
26-33	A4-A11	O	Address bus (4-11) for CPU
34	VDD	-	Power supply
35-40	A12-A17	O	Address bus (12-17) for CPU
41	A18	-	Address bus 18 for CPU (Not connect.)
42	A19	-	Address bus 19 for CPU (Not connect.)
43	VSS	-	Ground
44	A20	-	Address bus 20 for CPU (Not connect.)
45	DISCSTP	O	DISC STOP control
46	HAGUP	O	H/A gain control
47	TCLOSE	-	Not connect.
48	WOBBLEFIL	-	Not connect.
49	/HFMON	I	HF monitor
50	TRVSW	I	Detection switch of traverse inside

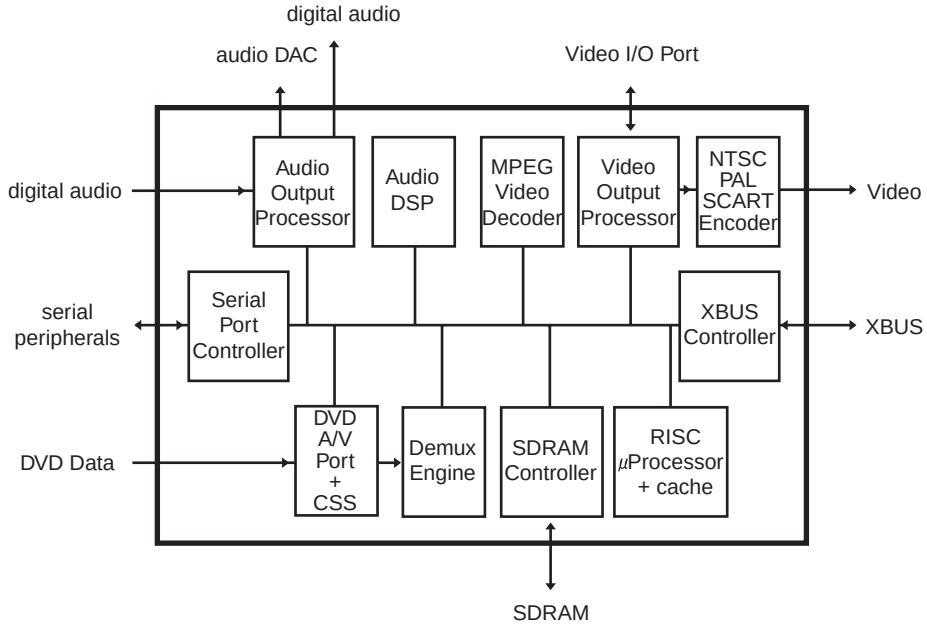
Pin No.	Symbol	I/O	Function
51	SWUPDN	-	Not connect.
52	MECHA_H/V	I	Disc detection
53	DISCSET	O	Serial enable signal for ADSC
54	VDD	-	Power supply
55	FEPEN	O	Serial enable signal for FEP
56	SLEEP	O	Standby signal for FEP
57	BUSY	-	Not connect.
58	REQ	O	Communication request
59		-	Connect to TP405 (REQ)
60		-	Not connect.
61	VSS	-	Ground
62	EPCS	O	EEPROM chip select
63	EPSK	O	EEPROM clock
64	EPDI	I	EEPROM data input
65	EPDO	O	EEPROM data output
66	VDD	-	Power supply
67	SCLKO	I	Communication clock
68	S2UTD	I	Communication input data
69	U2SDT	O	Communication output data
70	CPSCK	O	Clock for ADSC serial
71	P74/SBI1	-	Connect to VSS
72	SDOUT	O	ADSC serial data output
73		-	Not use. (Pull-up to power supply)
74		-	Not use. (Pull-up to power supply)
75	NMI	-	Not use. (Pull-up to power supply)
76	ADSCIRQ	I	Interrupt input of ADSC
77	ODCIRQ	I	Interrupt input of ODC
78	DECIRQ	I	Interrupt input of ZIVA
79	CSSIRQ	I	Interrupt input of SODC
80	ODCIRQ2	I	Interruption of system control
81	ADSEP	I	Address data selection input (Pull-up to power supply)
82	RST	I	Reset input
83	VDD	-	Power supply
84-91	TEST1-TEST 8	I	Test signal (1-8) input (Not connect.)
92	VSS	-	Ground
93-100	D0-7	I/O	Data bus (0-7) of CPU

6.29 NDV8611VWA (IC501) : Pantera

- Pin Layout



- Block Diagram



- Pin function

Pin No.	Symbol	I/O	Function
1	VDDIO		I/O pad power =3.3V
2, 3	MD	I/O	SDRAM data bus
4	VDD		Core power =1.8V
5	MD	I/O	SDRAM data bus
6	VSSIO		I/O pad ground
7, 8, 9	MD	I/O	SDRAM data bus
10	VDDIO		I/O pad power =3.3V
11	DQM	O	SDRAM data byte enables
12, 13	MA	O	SDRAM address bus
14	VSSIO		I/O pad ground
15, 16	MA	O	SDRAM address bus
17	VSS		Core and Ring ground
18	MA	O	SDRAM address bus
19	VDDIO		I/O pad power =3.3V
20, 21	MA	O	SDRAM address bus
22	MCLK	O	SDRAM clock
23	VSSIO		I/O pad ground
24	CKE	O	SDRAM clock enable
25, 26	MA	O	SDRAM address bus
27	VDDIO		I/O pad power =3.3V
28-30	MA	O	SDRAM address bus

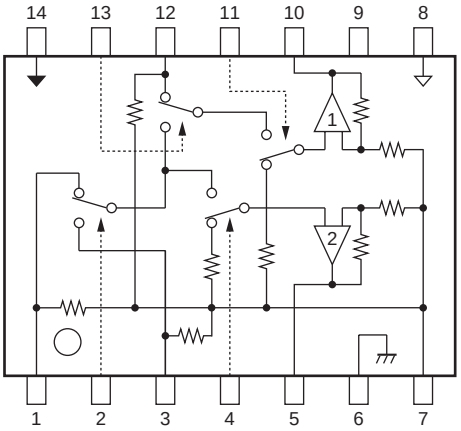
Pin No.	Symbol	I/O	Function
31	VSSIO		I/O pad ground
32, 33	MA	O	SDRAM address bus, reserved for pin compatibility with 64Mb SDRAM
34	VDD		Core power =1.8V
35	CS0	O	SDRAM primary bank chip select
36	VDDIO		I/O pad power =3.3V
37	RAS	O	SDRAM command bit
38	CAS	O	SDRAM command bit
39	WE	O	SDRAM command bit
40	VSSIO		I/O pad ground
41, 42	DQM	O	SDRAM data byte enables
43	MD	I/O	SDRAM data bus
44	VDDIO		I/O pad power =3.3V
45, 46	MD	I/O	SDRAM data bus
47	VSS		Core and Ring ground
48	MD	I/O	SDRAM data bus
49	VSSIO		I/O pad ground
50-52	MD	I/O	SDRAM data bus
53	VDDIO		I/O pad power =3.3
54, 55	MD	I/O	VSDRAM data bus
56	MD	I/O	SDRAM data bus
57	VSSIO		I/O pad ground
58-61	MD	I/O	SDRAM data bus
62	VDDIO		I/O pad power =3.3V
63, 64	MD	I/O	SDRAM data bus
65	DQM	O	SDRAM data byte enables
66	CS1	O	SDRAM extension bank chip select
67	VSSIO		I/O pad ground
68	SPDIF	O	S/PDIF digital audio output
69	VSS		Core and Ring ground
70	AIN	I	Digital audio input for digital micro
71	AOUT3	O	Serial audio output data to audio DAC for Lch and Rch for down-mixed stereo
72	AOUT2	O	Serial audio output data to audio DAC for SLch and SRch
73	AOUT1	O	Serial audio output data to audio DAC for Cch and LFEch
74	AOUT0	O	Serial audio output data to audio DAC for Lch and Rch
75	VDDIO		I/O pad power =3.3V
76	PCMCLK	O	Audio DAC PCM sampling click frequency, common clock for DACs and ADC
77	VDD		Core power =1.8V
78	ACLK	O	Audio interface serial data clock, common clock for DACs and ADC
79	LRCLK	O	L/R channel clock, common clock for DACs and ADC
80	SRST	O	Active low RESET signal for peripheral reset
81	RSTP	I	RESET input pin form system
82	VSSIO		I/O pad ground
83	RXD1	I	UART1 serial data input from external serial devise
84	SSPIN1/BAUD1	I/O	SSP1 data in or 16X clock for USART function in UART1
85	VSS		Core and Ring ground
86	SSPOUT1/DTR1	I/O	SSP1data out or UART1 data-terminal-ready signal
87	SSPCLK1/CTS1	I/O	SSP1clock or UART1 clear-to-send signal
88	SSPCLK0/RTS1	I/O	SSP0 clock or request-to-send function in UART1
89	VDD		Core power =1.8V
90	SSPIN0/BAUD0	I/O	SSP0 data in or 16X clock for USART function in UART0
91	VDDIO		I/O pad power =3.3V

Pin No.	Symbol	I/O	Function
92	SSPOUT0/DTR0	I/O	SSP0 data out or UART0 data-terminal-ready signal
93	TXD0	I/O	UART0 serial data output to an external serial device
94	RXD0	I	UART0 serial data input from external serial device
95	CTS0	I/O	UART0 clear-to-send signal
96	RTS0	I/O	UART0 request-to-send signal
97	VSSIO		I/O pad ground
98	CXI	I	Crystal input pin for on-chip oscillator or system input clock
99	CXO	O	Crystal output pin for on-chip oscillator
100	OSCVSS		Oscillator ground
101	OSCVDD		Oscillator power
102	MVCKVDD		Main and video clock PLL power
103	SCEN	I	Scan chain test enable
104	MVCKVSS		Main and video clock PLL ground
105	ACLKVSS		Audio clock PLL ground
106	SCMD	I	Scan chain test mode
107	ACLKVDD		Audio clock PLL power
108	VDDDAC		DAC digital power
109	VSSDAC		DAC digital ground
110	DAC3	O	Video DAC3 output
111	IOM	O	Cascaded DAC differential output used to dump current into external resistor for power
112	DAC2	O	Video DAC2 output
113	VAA3		DAC analog power
114	DAC1	O	Video DAC1 output
115	VSSA		DAC analog ground
116	VREF	I	Input voltage reference for output DACs
117	NC		Unused
118	DAC0	O	Video DAC output
119	RSET	O	Current setting resistor of output DACs
120	COMP	O	Compensation capacitor connection
121	VSS		Core and Ring ground
122	VIOCLK	I/O	VCLK input/output for video I/O port function
123	VSYNC	I/O	Bi-directional VSYNC signal for devices
124	HSYNC	I/O	Bi-directional HSYNC signal for devices
125	VDDIO		I/O pad power =3.3V
126-131	VIO	I/O	Bi-directional digital video port data bus
132	VSSIO		I/O pad ground
133, 134	VIO	I/O	Bi-directional digital video port data bus
135	VDD		Core power =1.8V
136-139	AD	I/O	Multipleced address/data bus
140	VDDIO		I/O pad power =3.3V
141-144	AD	I/O	Multipleced address/data bus
145	PWE	I/O	Byte write enable for FLASH, EEPROM, SRAM or peripherals
146	AD	I/O	Multipleced address/data bus
147	VSSIO		I/O pad ground
148-153	AD	I/O	Multipleced address/data bus
154	VDDIO		I/O pad power =3.3V
155	AD	I/O	Multipleced address/data bus
156	PWE	I/O	Byte write enable for FLASH, EEPROM, SRAM or peripherals
157, 158	AD	I/O	Multipleced address/data bus
159	VDD		Core power =1.8V
160	SCLK	O	External bus clock used for programmable host bus peripherals

Pin No.	Symbol	I/O	Function
161	ACK	I/O	Programmable WAIT-/ACK-/RDY- control
162	VSSIO		I/O pad ground
163-168	AD	I/O	Multipleced address/data bus
169	VDDIO		I/O pad power =3.3V
170	PWE	I/O	Byte write enable for FLASH, EEPROM, SRAM or peripherals
171	VSS		Core and Ring ground
172-176	AD	I/O	Multipleced address/data bus
177	VSSIO		I/O pad ground
178-180	AD	I/O	Multipleced address/data bus
181	VDDIO		I/O pad power =3.3V
182	PWE	I/O	Byte write enable for FLASH, EEPROM, SRAM or peripherals
183	ALE	I/O	Address latch enable
184-187	LA	I/O	Latched address
188	VSSIO		I/O pad ground
189	RD	I/O	Read
190	LHLDA	O	Bus hold acknowledge in slave mode
191	LHLD	I	Bus hold request from external master in slave mode
192	VDD		Core power =1.8V
193	PCS0	O	Peripheral chip select 0
195	XIO	I/O	External input/output
196	VDDIO		I/O pad power =3.3V
197-200	XIO	I/O	External input/output
201	VSS		Core and Ring ground
202-203	XIO	I/O	External input/output
204	VSSIO		I/O pad ground
205-209	XIO	I/O	External input/output
210	VDDIO		I/O pad power =3.3V
211	XIO	I/O	External input/output
212	VDD		Core power =1.8V
213	DSYNC	I	DVD parallel mode Sector Sync
214	DRQE	O	DVD parallel mode Data Request
215	DCLK	I	Data sampling clock
216	DSTB	I	Parallel mode Data valid, serial mode left/ right clock
217	DVD	I	DVD drive parallel data port
218	VSSIO		I/O pad ground
219-223	DVD	I	DVD drive parallel data port
224	VDDIO		I/O pad power =3.3V
225	DVD	I	DVD drive parallel data port
226	DVD	I	DVD drive parallel data port
227	MD	I/O	SDRAM data bus
228	VSSIO		I/O pad ground
229	MD	I/O	SDRAM data bus
230	VSS		Core and Ring ground
231, 232	MD	I/O	SDRAM data bus
233	VDDIO		I/O pad power =3.3V
234-236	MD	I/O	SDRAM data bus
237	VSSIO		I/O pad ground
238-240	MD	I/O	SDRAM data bus

6.30 NJM2279M-W (IC402,IC403,IC404) : 3-input 2-output video switch

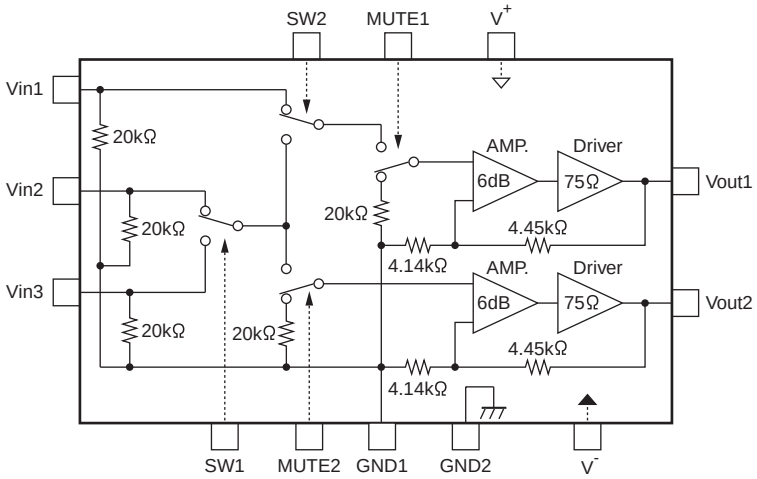
- Pin Layout



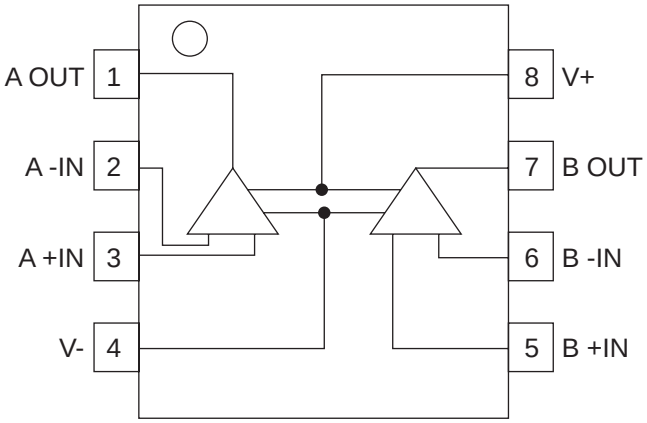
- Pin function

1	Vin3	8	V+
2	SW1	9	N.C.
3	Vin2	10	Vout1
4	MUTE2	11	MUTE1
5	Vout2	12	Vin1
6	GND2	13	SW2
7	GND1	14	V-

- Block Diagram

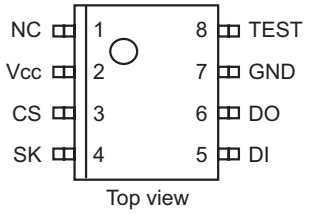


6.31 NJM4580E-W (IC911,IC921,IC941,IC951,IC971,IC981,IC991 to IC994) : Ope amp.



6.32 S-93C66AFJ-X (IC451) : Memory

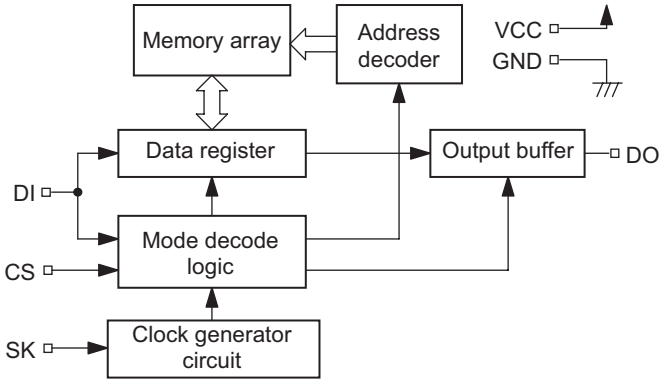
- Pin layout



- Pin function

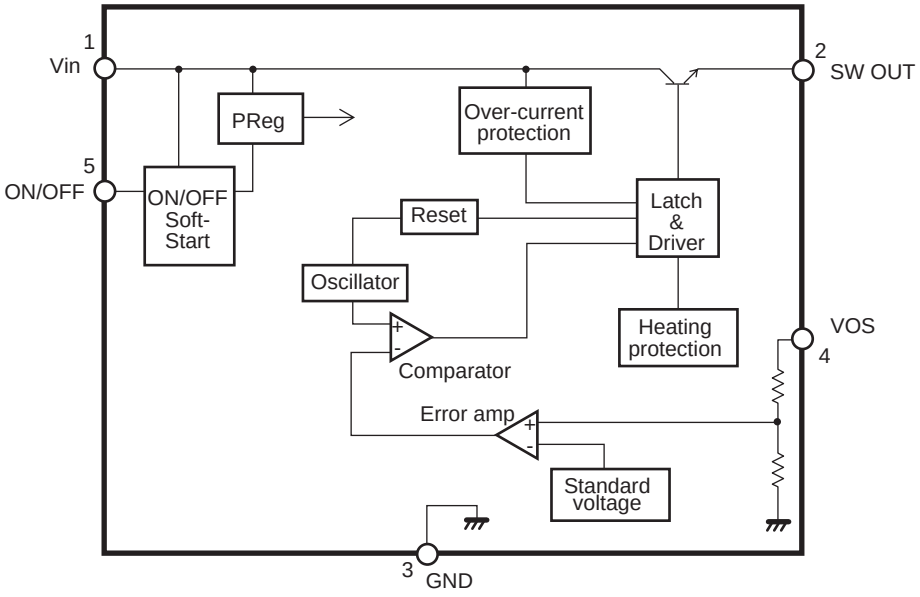
Pin No.	Symbol	Function
1	NC	Not connect
2	Vcc	Power supply
3	CS	Chip select input
4	SK	Serial clock input
5	DI	Serial data input
6	DO	Serial data output
7	GND	Ground
8	TEST	TEST pin:Open

- Block diagram



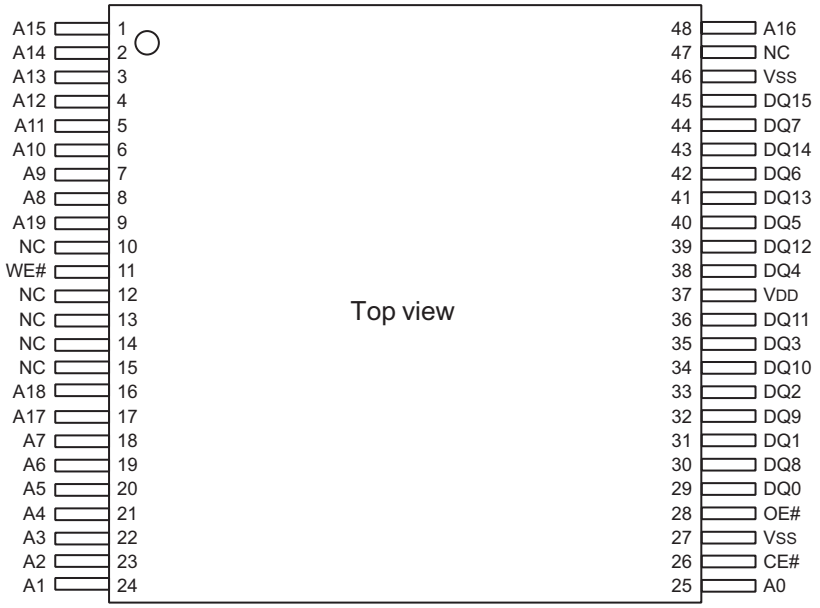
6.33 SI-8033JF (IC191) : Switching regulator

- Block Diagram

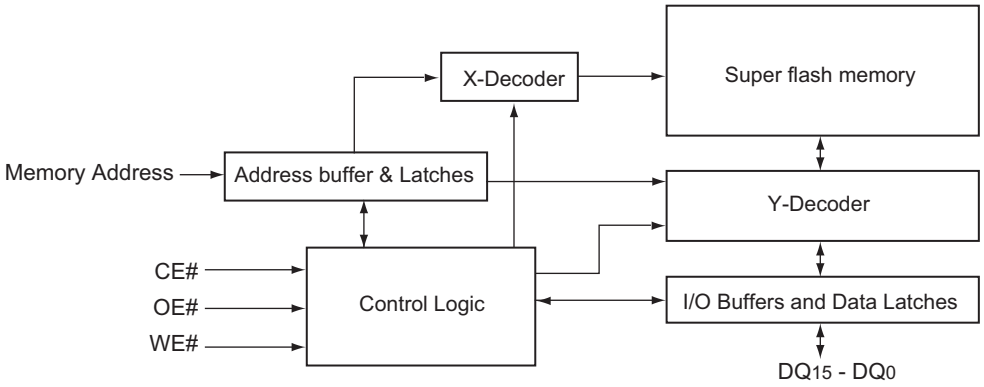


6.34 SST39VF160-7CEK (IC509) : 16 Mbit multi-purpose flash memory

- Pin layout



- Block diagram



- Pin function

Pin No.	Symbol	I/O	Function
1-9	A15-A8,A19	I	Address inputs : To provide memory addresses. During Sector-Erase A19-A11 address lines will select the sector. During Block-Erase, A19-A15 address line will select the block.
10	NC	-	No connection : Unconnected pins
11	WE#	I	Write Enable : To control the Write operations
12-15	NC	-	No connection : Unconnected pins
16-25	A18,A17,A7-A0	I	Address inputs : To provide memory addresses. During Sector-Erase A19-A11 address lines will select the sector. During Block-Erase, A19-A15 address line will select the block.
26	CE#	I	Chip Enable : To activate the device when CE# is low.
27	VSS	-	Ground
28	OE#	I	Output Enable : To gate the data output buffers
29-36	DQ0,DQ8,DQ1 DQ9,DQ2,DQ10 DQ3,DQ11	I/O	Data input/output : To output data during Read cycles and receive input data during write cycles. Data is internally latched during a write cycle. The outputs are in tri-state when OE# or CE# is high.
37	VDD	-	Power supply : To provide power supply voltage (2.7-3.6V)
38-45	DQ4,DQ12,DQ5 DQ13,DQ6,DQ14 DQ7,DQ15	I/O	Data input/output : To output data during Read cycles and receive input data during write cycles. Data is internally latched during a write cycle. The outputs are in tri-state when OE# or CE# is high.
46	VSS	-	Ground
47	NC	-	No connection : Unconnected pins
48	A16	I	Address input : To provide memory address. During Sector-Erase A19-A11 address lines will select the sector. During Block-Erase, A19-A15 address line will select the block.

6.35 TC9446F-025 (IC631): Digital signal processor for dolby digital (AC-3) / DTS audio decode

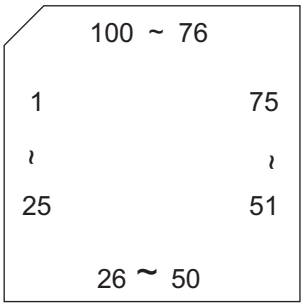
• Pin Function

Pin No.	Symbol	I/O	Function
1	RST	I	Reset signal input terminal (L:reset H: normal operation)
2	MIMD	I	Microcomputer interface mode selection input terminal (L:serial H:IC bus)
3	MICS	I	Microcomputer interface chip select input terminal
4	MILP	I	Microcomputer interface latch pulse input
5	MIDIO	I/O	Microcomputer interface data I/O terminal
6	MICK	I	Microcomputer interface clock input terminal
7	MIACK	O	Microcomputer interface acknowledge output terminal
8~11	FI0~3	I	Flag input terminal 0~3
12	IRQ	I	Interrupt input terminal
13	VSS	-	Digital ground terminal
14	LRCKA	I	Audio interface LR clock input terminal A
15	BCKA	I	Audio interface bit clock input terminal A
16~18	SDO0~2	O	Audio interface data output terminal 0
19	SD03	-	Non connect
20	LRCKB	I	Audio interface LR clock input terminal B
21	BCKB	I	Audio interface bit clock input terminal B
22	SDT0	I	Audio interface data input terminal 0
23	SDT1	I	Audio interface data input terminal 1
24	VDD	-	Power supply for digital circuit
25	LRCKOA	O	Audio interface LR clock output terminal A
26	BCKOA	O	Audio interface bit clock output terminal A
27, 28	TEST0,1	I	Test input terminal 0/1 (L:test H: normal operation)
29~30	LRCKOBBCKOB	-	Non connect
31	TXO	O	SPDIF Output
32, 33	TEST2,3	I	Test input terminal (L:test H: normal operation)
34	RX	I	SPDIF input terminal
35	VSS	-	Ground terminal for digital circuit
36	TSTSUB0	I	Test sub input terminal 0 (L:test H: normal operation)
37	FCONT	O	VCO Frequency control output terminal
38, 39	TSTSUB1TSTSUB2	I	Test sub input terminal 12 (L:test H: normal operation)
40	PDO	O	Phase detect signal output terminal
41	VDDA	-	Power supply for analog circuit
42	PLON	I	Clock selection input terminal (L:external clock H:VCO clock)
43	AMPI	I	amplifier input terminal for LPF
44	AMPO	O	amplifier output terminal for LPF
45	CKI	I	External clock input terminal
46	VSSA	-	Ground terminal for analog circuit
47	CKO	O	DIR Clock output terminal
48	LOCK	O	VCO Lock output terminal
49	VSS	-	Ground terminal for digital circuit
50	WR	O	External SRAM writing signal output terminal
51	OE	O	External SRAM output enable signal output terminal
52	CE	O	External SRAM chip enable signal output terminal
53	VDD	-	Power supply terminal for digital circuit
54~61	IO7~0	I/O	External SRAM data I/O terminal 7~0
62	VSS	-	Ground terminal for digital circuit
63~70	AD0~7	O	External SRAM address output terminal 0~7
71	VDD	-	Power supply terminal for digital circuit
72~80	AD8~16	O	External SRAM address output terminal 8~16
81	VSS	-	round terminal for digital circuit
82~89	PO0~7	O	General purpose output terminal 0~7
90	VDDDL	-	Power supply terminal for DLL
91	LPFO	O	LPF output terminal for DLL
92, 93	DLON,DLCKS	I	Refer to the undermentioned table
94	SCKO	-	Non connect
95	VSSDL	-	Ground terminal for DLL
96	SCKI	I	External system clock input terminal
97	VSSX	-	Ground terminal for oscillation circuit
98, 99	XO,XI	I/O	Oscillation I/O terminal
100	VDDX	-	Power supply terminal for oscillation circuit

DLCKS terminal	DLON terminal	DLL clock setting
L	L	SCKI input (DLL circuit OFF)
L	H	Four times XI clock
H	L	Three times XI clock
H	H	Six times XI clock

6.36 UPD784215AGC167 (IC671): Digital signal controller

- Pin layout



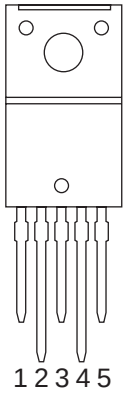
- Pin function

Pin No.	Symbol	I/O	Function
1~8		-	Non connect
9	VDD	-	Power supply terminal
10	X2	O	Connecting the crystal oscillator for system main clock
11	X1	I	Connecting the crystal oscillator for system main clock
12	VSS	-	Connect to GND
13	XT2	O	Connecting the crystal oscillator for system sub clock
14	XT1	I	Connecting the crystal oscillator for system sub clock
15	RESET	I	System reset signal input
16	AUTODATA	I	Output of DSP to general-purpose port
17	LOCK	I	Output of DSP to general-purpose port
18	DIGITAL0	I	Output of DSP to general-purpose port
19	FORMAT	I	Output of DSP to general-purpose port
20	CHANNEL	I	Output of DSP to general-purpose port
21	ERR	I	Output of DSP to general-purpose port
22	REST IN	I	Reset signal input
23	AVDD	-	Power supply terminal
24	AVREF0	-	Connect to GND
25		-	Connect to GND
26		-	Connect to GND
27		-	Connect to GND
28		-	Connect to GND
29		-	Connect to GND
30		-	Connect to GND
31		-	Connect to GND
32		-	Connect to GND
33	AVSS	-	Connect to GND
34,35		-	Non connect
36	AV REF1	-	Power supply terminal
37	RX	-	Not use
38	TX	-	Not use
39		-	Non connect
40	DSPCOM	I	Communication port from IC701
41	DSPSTS	O	Status communication port to IC701
42	DSPCLK	I	Clock input from IC701
43	DSPRDY	I	Ready signal input from IC701
44		-	Non connect

Pin No.	Symbol	I/O	Function
45	MIDIO IN	I/O	Interface I/O terminal with microcomputer
46	MIDIO OUT	I/O	Interface I/O terminal with microcomputer
47	MICK	O	Interface I/O terminal with microcomputer of clock signal
48	MICS	O	Interface I/O terminal with microcomputer of chip select
49	MILP	O	Interface I/O terminal with microcomputer
50	MIACK	O	Interface I/O terminal with microcomputer
51		-	Non connect
52		-	Non connect
53	DSPRST	O	Reset signal output of DSP
54~63		-	Non connect
64	CODEC OUT	I/O	Interface I/O terminal with microcomputer
65	CODEC IN	I/O	Interface I/O terminal with microcomputer
66	CODEC CLK	O	Interface I/O terminal with microcomputer of clock signal
67	CODEC CS	O	Interface I/O terminal with microcomputer of chip select
68	CODEC XTS	-	Non connect
69		-	Non connect
70		-	Non connect
71	PD	O	Reset signal output
72	GND	-	Connect to GND
73		-	Non connect
74		-	Non connect
75		-	Non connect
76		-	Non connect
77		-	Non connect
78		-	Non connect
79		-	Non connect
80		-	Non connect
81	VDD	-	Power supply
82		-	Non connect
83		-	Non connect
84	ANA/T-TONE	O	Test tone control
85	LEF-MIX	O	Control at output destination of LFE channel
86		-	Non connect
87	D.MUTE	O	Mute of the digital out terminal is controlled
88	S.MUTE	O	Mute of the audio signal is controlled
89		O	Non connect
90	ASW1	O	Selection of digital input selector
91	ASW2	-	Selection of digital input selector
92	ASW3	-	Selection of digital input selector
93	ASW4	-	Selection of digital input selector
94	TEST	-	Test terminal
95		-	Non connect
96		-	Non connect
97		-	Non connect
98		-	Non connect
99		-	Non connect
100		-	Non connect

6.37SI-8050JF-F1 (IC192) : Switching Regulator

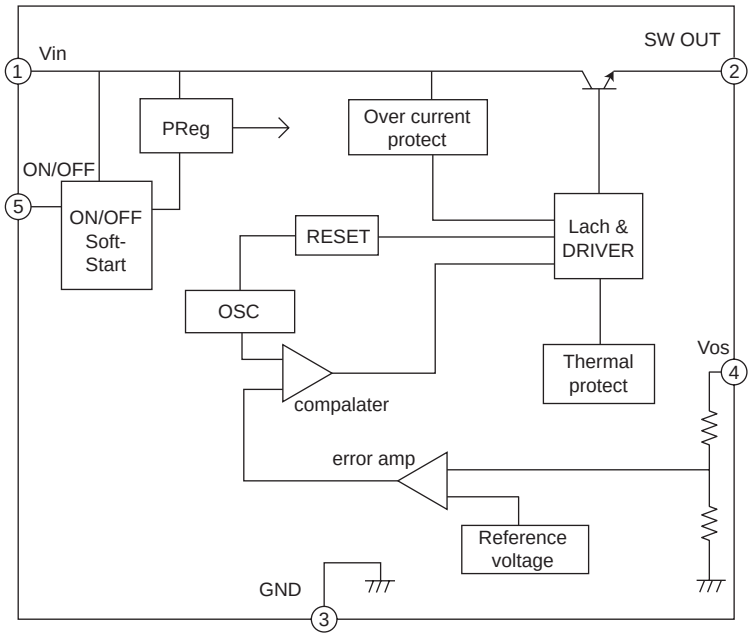
- Pin layout



- Pin function

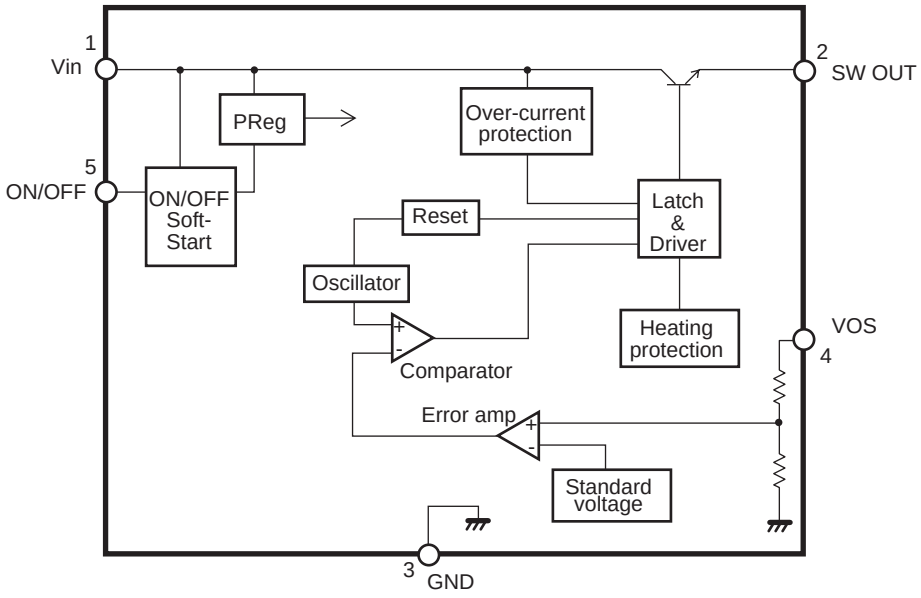
Pin No.	Pin function
1	Vin
2	SW out
3	GND
4	Vos
5	ON/OFF

- Block diagram



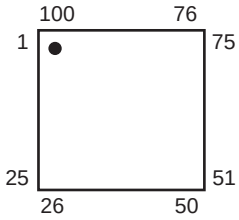
6.38 SI-8090JF (IC193) : Switching regulator

- Block Diagram



6.39 MN101C35DKF (IC701) : Panel micon

- Pin Layout

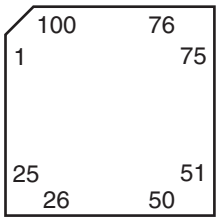


- Pin function

Pin No.	Symbol	I/O	Function
1 to 7	NC	-	Not connect
8	VDD	-	Power supply
9	OSC2	O	8MHz
10	OSC1	I	8MHz
11	VSS	-	Ground
12	XI	I	Connect to ground
13	XO	O	Not connect
14	MMOD	-	Connect to ground
15	VREF-	-	Connect to ground
16	KEY1	I	Key input 1 (7 key)
17	KEY2	I	Key input 2 (7 key)
18	KEY3	I	Key input 3 (7 key)
19	KEY4	I	Key input 4 (7 key)
20	KEY5	I	Key input 5 (7 key)
21	KEY6	I	Key input 6 (7 key)
22	CS1	I	Chip select 1
23	CS2	I	Chip select 2
24	VREF+	-	Connect to power supply
25	LED_DIMMER	O	LED dimmer
26	M_RESET	I	Reset input
27	BLUE_LED	O	LED (BLUE)
28	VCR_LED	O	LED (VCR)
29	STB_LED	O	LED (STB)
30	DVDA_LED	O	LED (DVD audio)
31	DVD_LED	O	LED (DVD)
32	M_BUSY	O	Micon communication BUSY
33	M_CS	I	Micon communication CS
34	REMO	I	Remote control input
35	JOG1	I	Volume JOG input 1
36	JOG2	I	Volume JOG input 2
37,38	NC	-	Not connect
39	M_STATUS	O	Micon communication status output
40	M_COMMAND	I	Micon communication command input
41	M_CLK	I	Micon communication CLK
42 to 50	NC	-	Not connect
51 to 63	G1 to G13	O	GRID1 to GRID13
64 to 99	P36 to P1	O	SEGMENT36 to SEGMENT1
100	VPP	-	VPP

6.40 MN101C49GMM1 (IC761) : System control micon

- Pin Layout



- Pin function

Pin No.	Symbol	I/O	Function
1	GND	-	Ground
2	NTSC/PAL	I	NTSC/PAL discrimination switch (RBG switching discrimination)
3	VCR S/C	I	VCR S/Composite detection
4	DBS S/C	I	DBS S/Composite detection
5	SAFETY	I	Short detection
6	TH	I	Short state and heat sink temperature detection
7	OUTPUTLEVEL	I	Output level detection
8	VSR IN	I	VCR voltage detection
9	DBS IN	I	STB voltage detection
10	VREF+	-	Reference voltage
11	VDD	-	Power supply
12	OSCOUT	O	8MHz crystal output
13	OSCIN	I	8MHz crystal input
14	GND	-	Ground
15	GND	-	Ground
16	NC	-	Not connect
17	GND	-	Ground
18	DI DO	O	Panel control serial communication DATA OUT
19	DI DI	I	Panel control serial communication DATA IN
20	DI CLK	O	Panel control serial communication CLOCK
21	S2UDT	O	PANTERA serial communication DATA OUT
22	U2SDT	I	PANTERA serial communication DATA IN
23	SCLK	I	PANTERA serial communication CLOCK
24	INTP	O	PANTERA communication transmitting request
25	CPURST	O	PANTERA reset
26	CS	I	PANTERA communication receiving request (Interrupt)
27	GND	-	Ground
28	PROTECT	I	Speaker protect detection
29	NC	-	RDS communication STROBE (Interrupt), connect to ground
30	DI BUSY	I	Panel control communication busy
31	HPSW	I	Headphone detection
32	VDD2/FLASH-VDD	-	Flash memory writing power supply port
33	RESET IN	I	System control reset input
34	DSP RST	O	DSP micon reset output
35	DSP RDY	O	DSP micon ready
36	AVC OUT	O	AV compulink output
37	AVC IN	I	AV compulink input

Pin No.	Symbol	I/O	Function
38	VIDEO MUTE1	O	Video driver MUTE1 control
39	VIDEO MUTE2	O	Video driver MUTE2 control
40	VIDEO YCMIX	O	Video driver YCMIX control
41	VPP/FLASH-VSS	O	Flash memory writing power supply port
42	DSP COM	O	DSP serial communication DATA OUT
43	DSP STAT	I	DSP serial communication DATA IN
44	DSP CLK	O	DSP serial communication CLOCK
45	VOL DATA	O	VOLUME serial communication DATA OUT (M61516)
46	VOL LATCH	O	VOLUME serial communication STROBE (M61516)
47	VOL CLK	O	VOLUME serial communication CLOCK (M61516)
48	NC	-	DIGITAL OUT mute control (ON:H)
49	INT/PROG	O	DIGITAL terminal LINE2 switching (INT:H,PROG:L)
50	HEADPHONE RE-LAY	O	Headphone relay switching (ON:H)
51	VIDEO RGB	O	Video driver RGB control
52	NC	-	Not connect
53	NC	-	Not connect
54	FRT2 SPK RELAY	O	Front speaker relay switching 2 (ON:H)
55	FRT1 SPK RELAY	O	Front speaker relay switching 1 (ON:H)
56	CNT SPK RELAY	O	Center speaker relay switching (ON:H)
57	REAR SPK RELAY	O	Rear speaker relay switching (ON:H)
58	S1RELAY	O	Power amplifier power supply control (ON:H)
59	INH	I	AC cutting off detection (INH:L)
60	NC	-	SLOW switching output
61	NC	-	SLOW switching output
62	SYSTEM PON	O	System power supply control (ON:H)
63	FAN ON/OFF	O	Fan ON/OFF control (ON:H)
64	DVD PON	O	DVD power supply control (ON:L)
65	TUNER PON	O	TUNER power supply control (ON:H)
66	ME ON	O	MECHA power supply control (ON:L)
67	RDS DATA	I/O	RDS communication DATA, not connect
68	NC	-	RDS communication CLOCK, not connect
69	NC	-	TUNER stereo detection, not connect
70	TUNER DATA IN	I	TUNER serial communication DATA IN
71	NC	-	Not connect
72	TUNER DATA	O	TUNER serial communication DATA OUT
73	TUNER CLK	O	TUNER serial communication CLOCK
74	TUNER CE	O	TUNER serial communication CE
75	S1OUT	O	For S1 output control
76	SMUTE	O	System mute (MUTE:H)
77	DSPON	O	DSP power supply control (ON:H)
78		O	Not connect
79	STANDBY LED	O	Standby LED control (ON:L)
80	FAN LOW	O	Fan control 1 (ON:H)
81	FAN MID	O	Fan control 2 (ON:H)
82	DISC SET	O	Read start permission to front end (SET:H)

Pin No.	Symbol	I/O	Function
83	DISC STOP	I	EJECT permission from front end (STOP:H)
84	FAN HIGH	O	Fan control 3 (ON:H)
85	NC	-	Not connect
86	SW MUTE	O	Sub woofer mute (MUTE:H)
87	VIDEO SW1	O	Video switching output 1
88		O	Video switching output 2
89		O	Video switching output 3
90	VIDEO SW4	O	Video switching output 4
91	DI RST	O	Panel control reset output
92	DI CS	O	Panel control serial communication CS
93	NC	-	Not connect
94	LMUTE	O	Loader mute output
95	DAVSS	-	Ground
96	SWOPEN	I	Loader OPEN/CLOSE SW detection
97	SWUPDN	I	Loader mechanism down detection
98	TOPEN	O	Loader motor open control (PWM)
99	TCLOSE	O	Loader motor close control (PWM)
100	DAVDD	-	Power supply

JVC
VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22023)

Printed in Japan
WPC

JVC

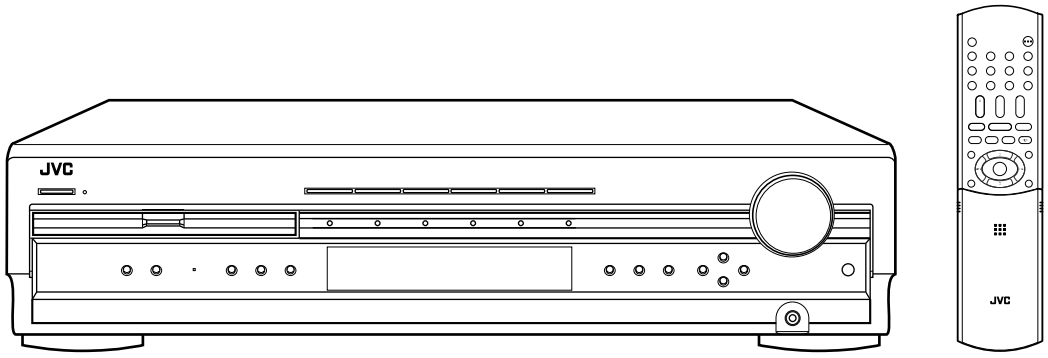
SCHEMATIC DIAGRAMS

HOME THEATER DVD-AUDIO/VIDEO RECEIVER

RX-DV31SL

CD-ROM No.SML200307

Area suffix	
J	U.S.A.
C	Canada



AV COMPU LINK

Digital Direct Progressive Scan

Contents

Block diagrams ---------- 2-1
Standard schematic diagrams ---------- 2-4
Printed circuit boards ---------- 2-14 to 20

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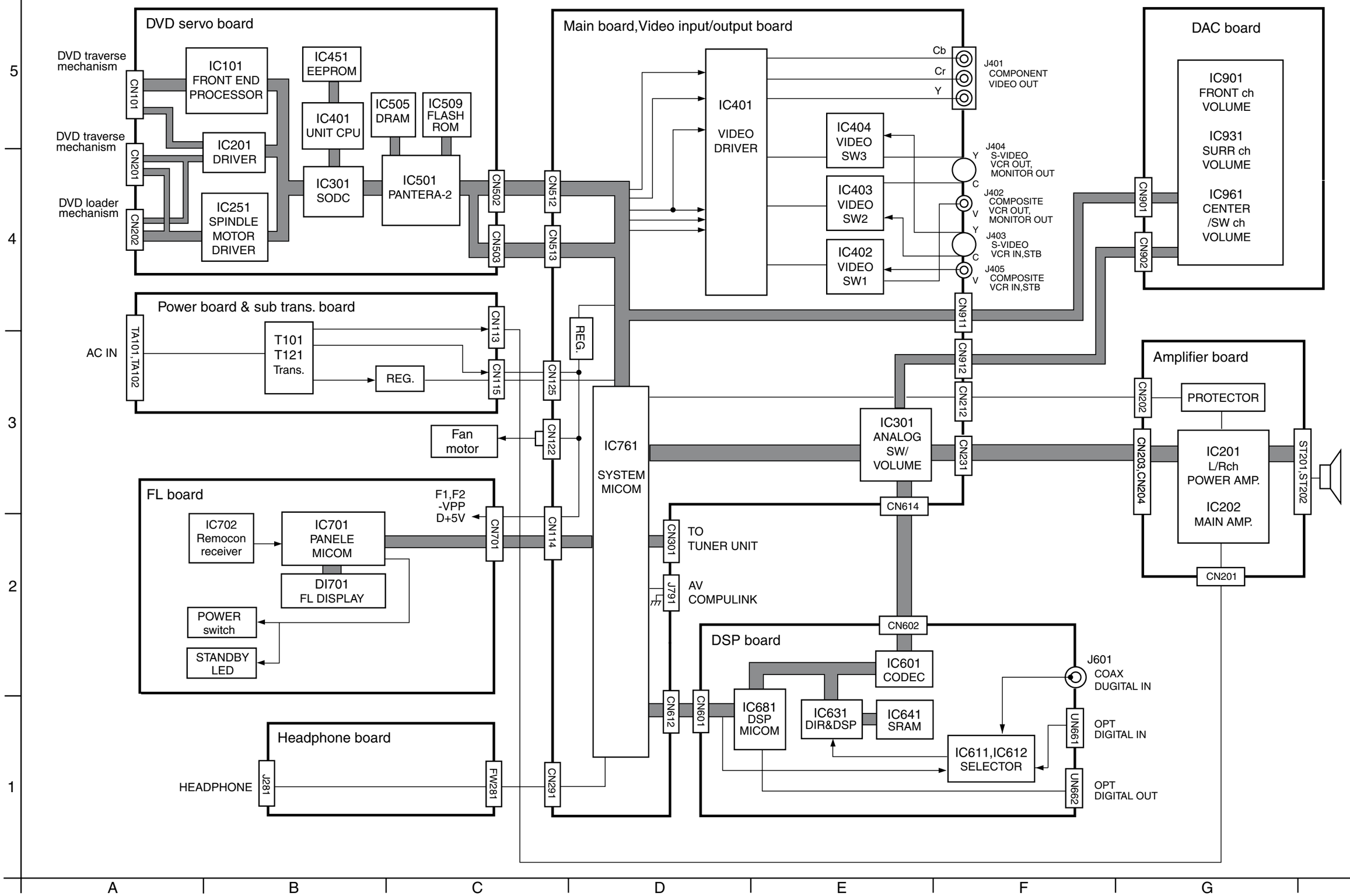
No.22023SCH
2003/7

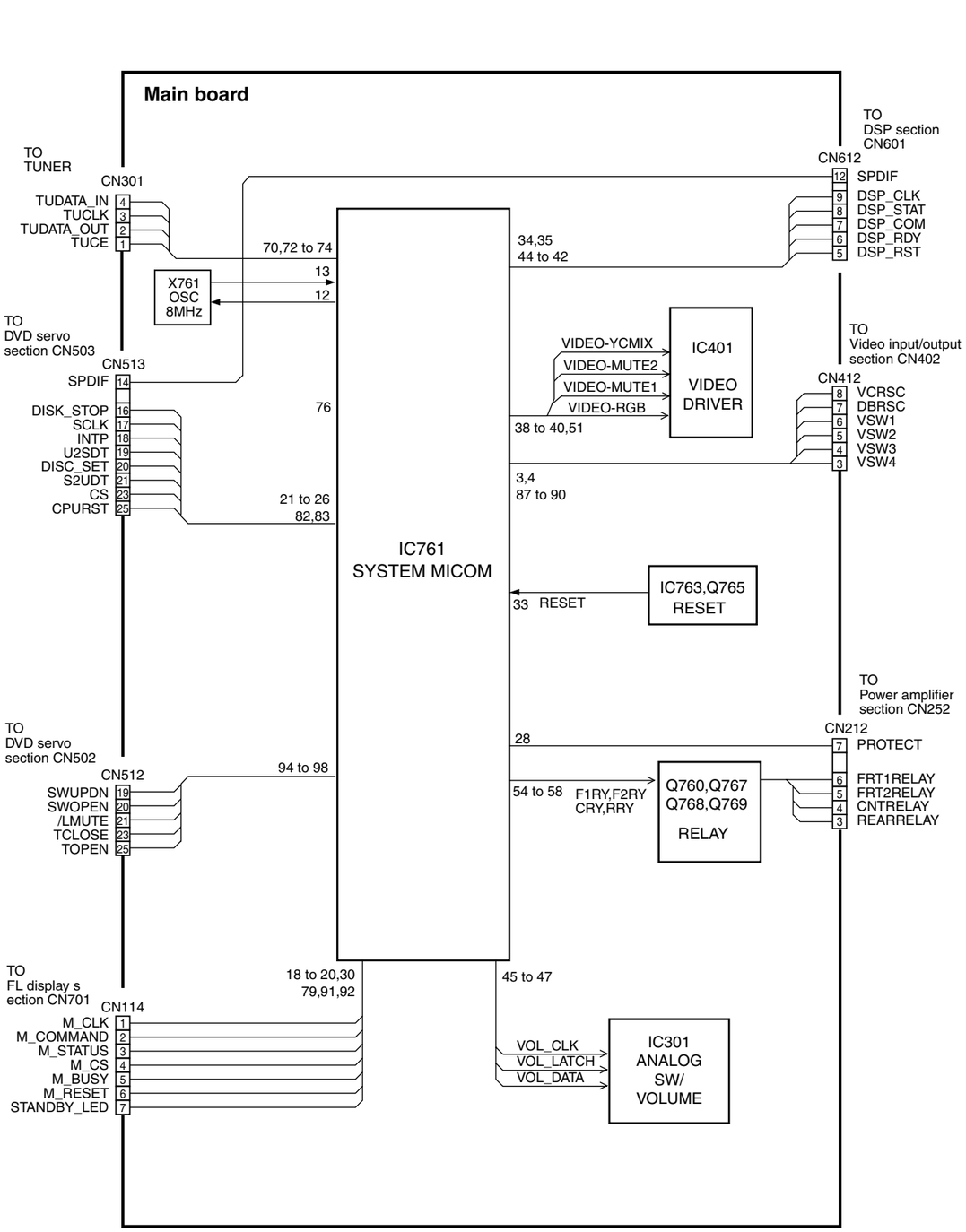
In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▬) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.
(This regulation does not correspond to J and C version.)

Block diagrams

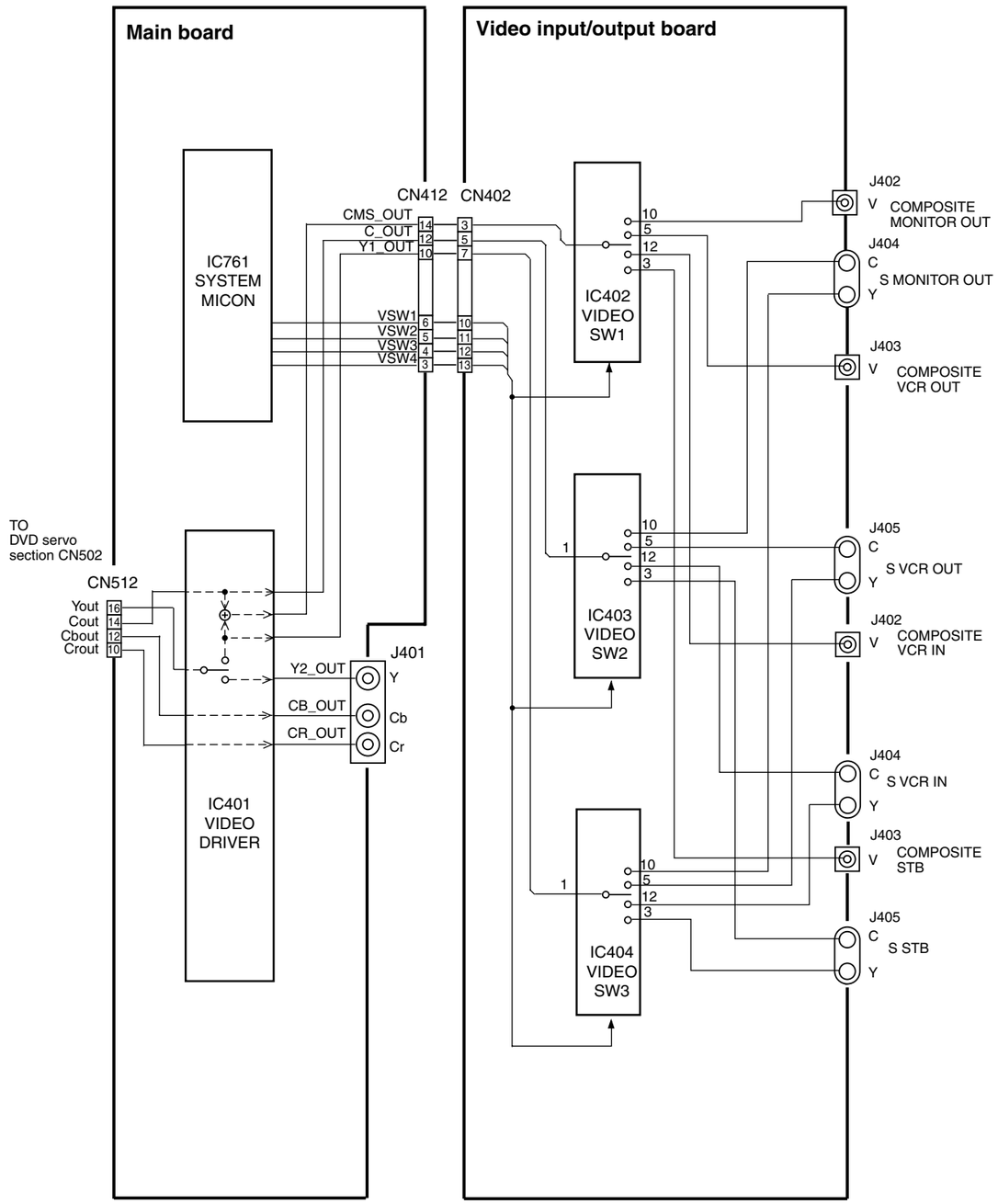
■ Overall block diagram



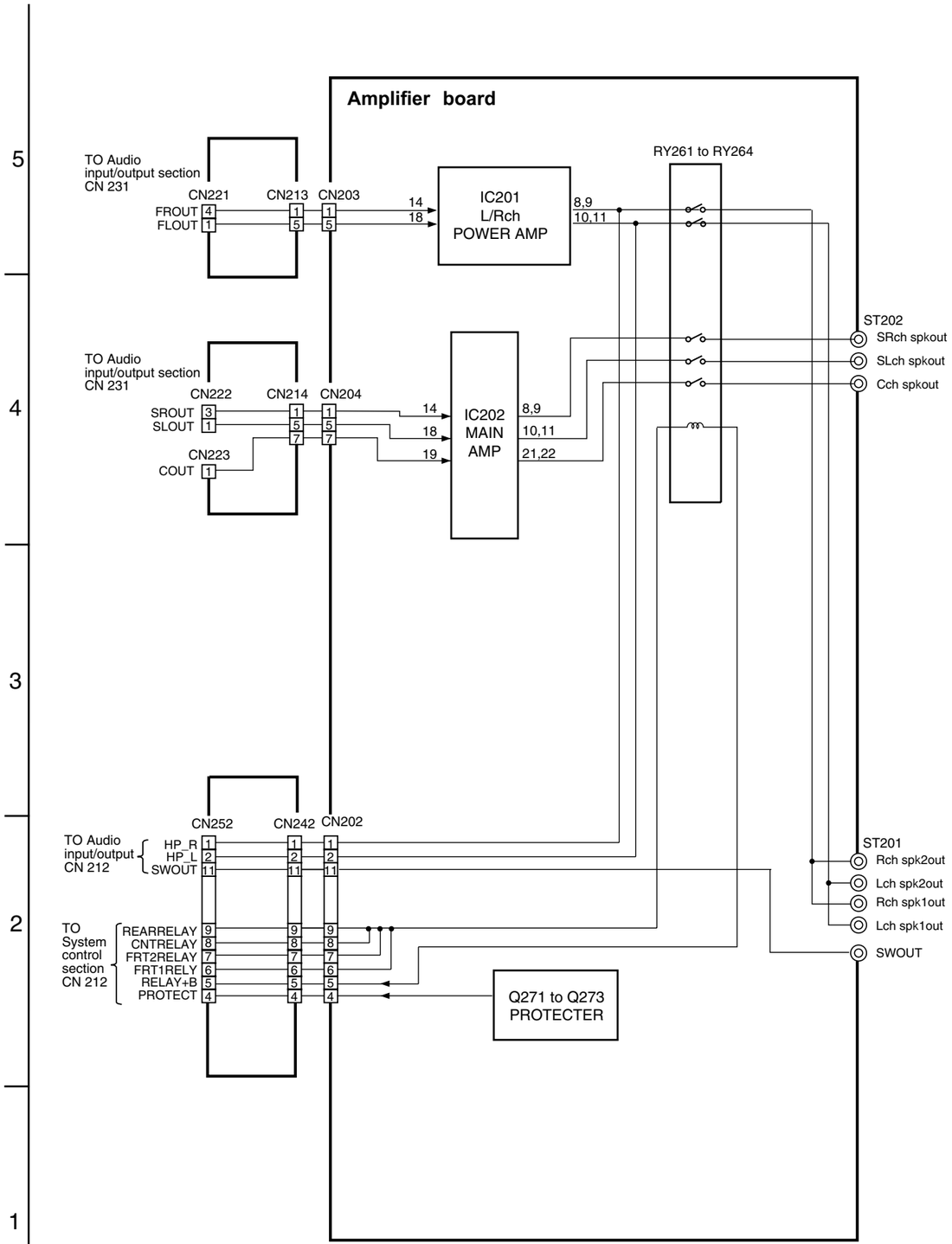
■ System control section



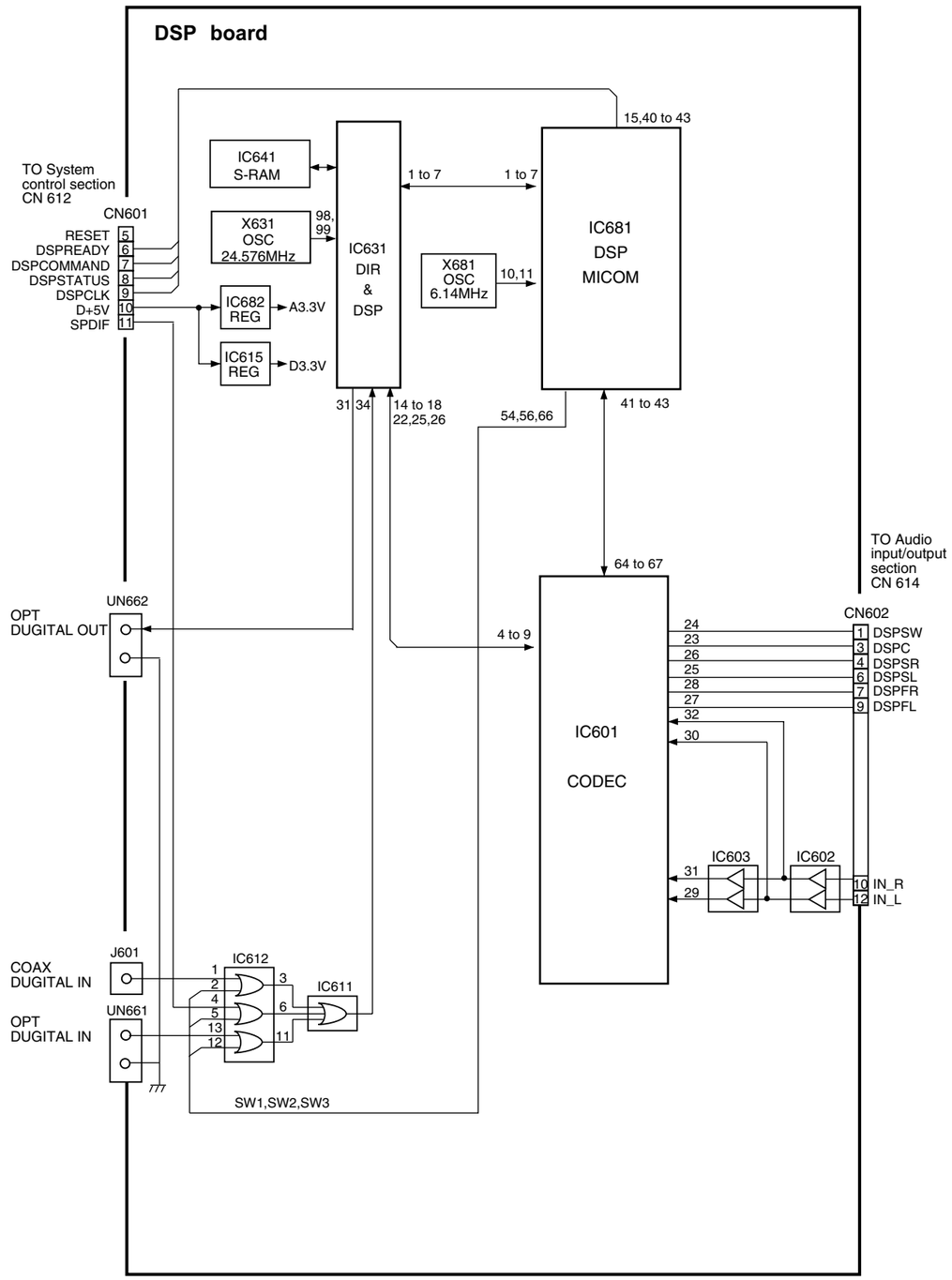
■ Video input/output section



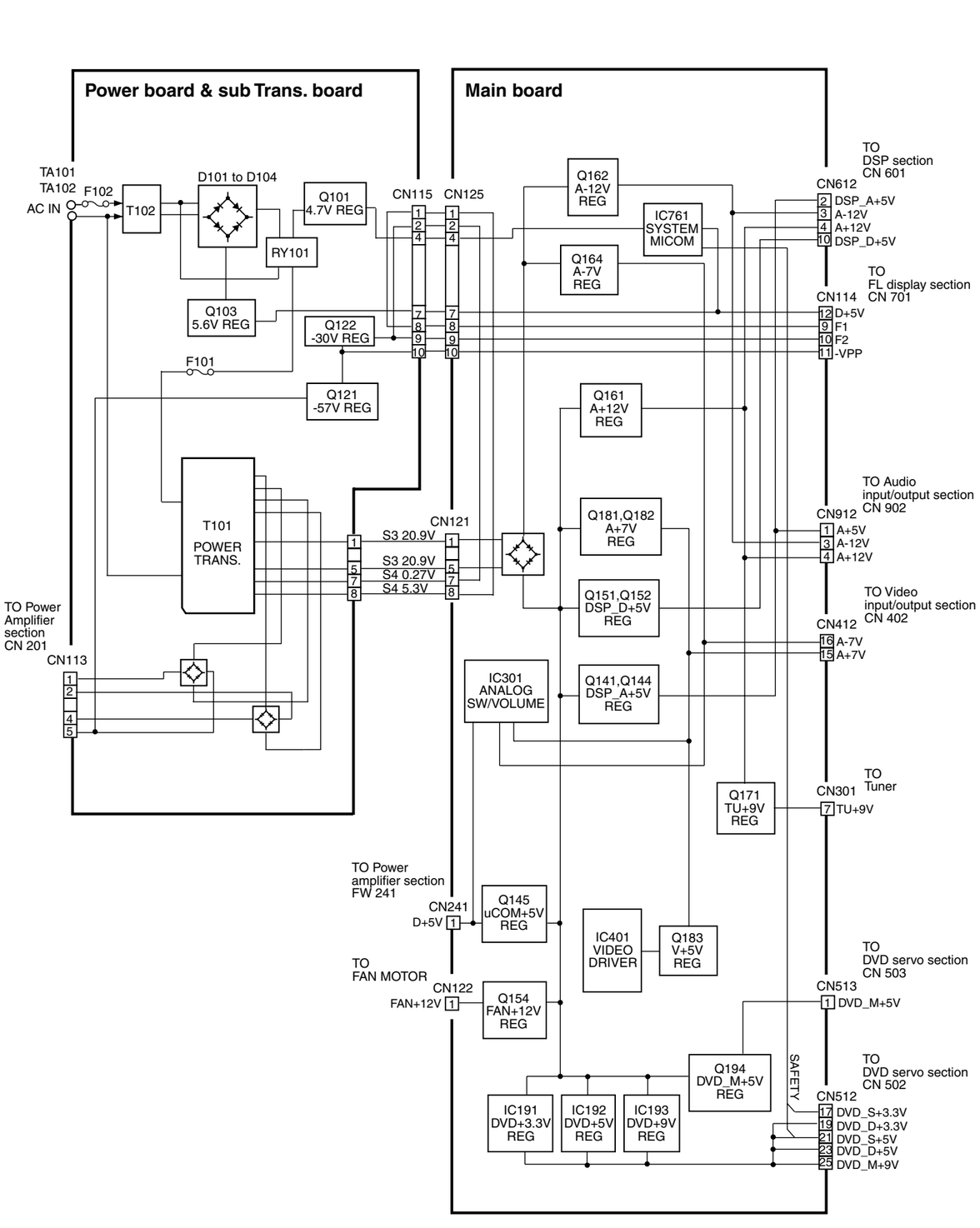
■ Power amplifier section



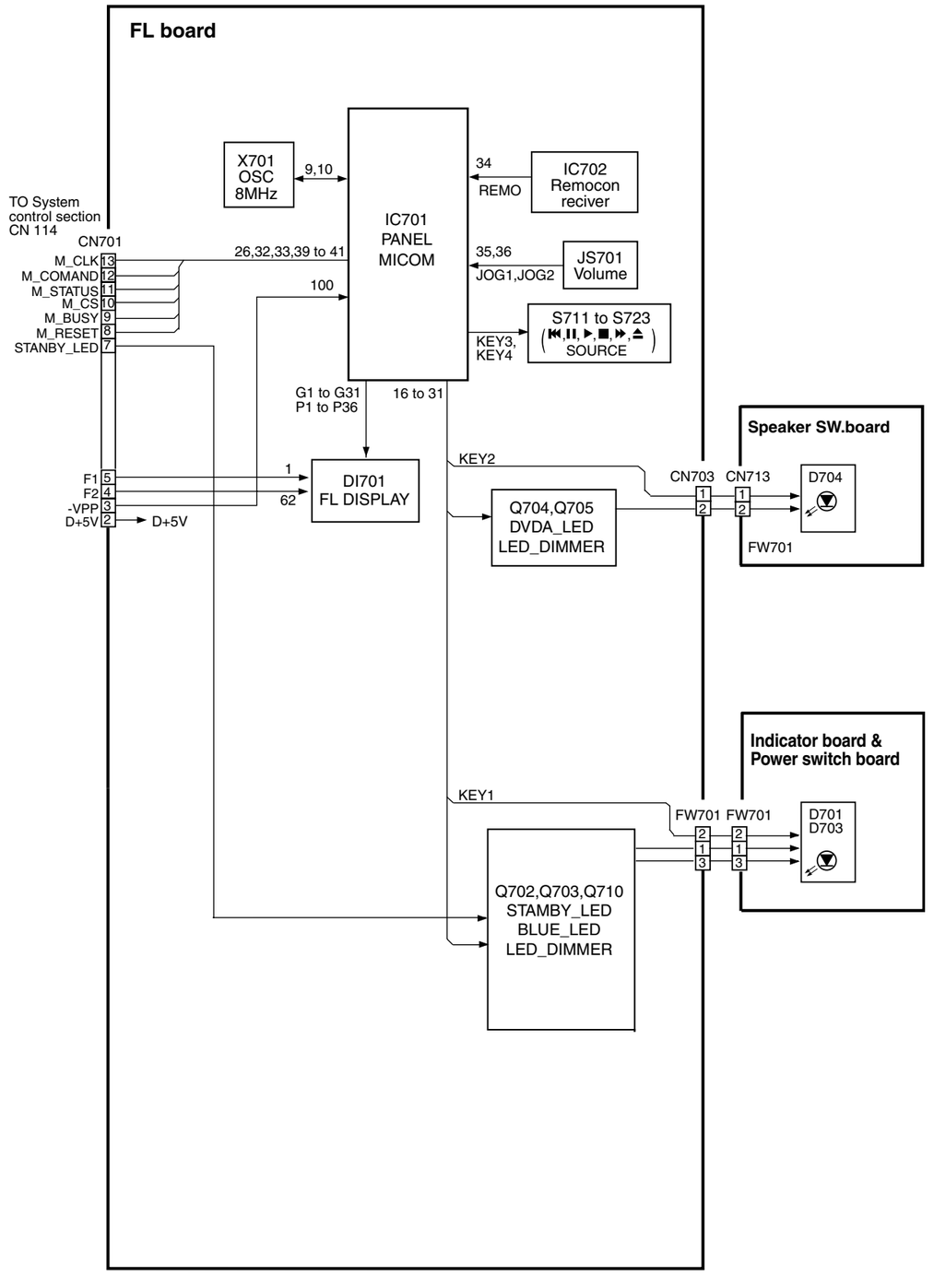
■ DSP section



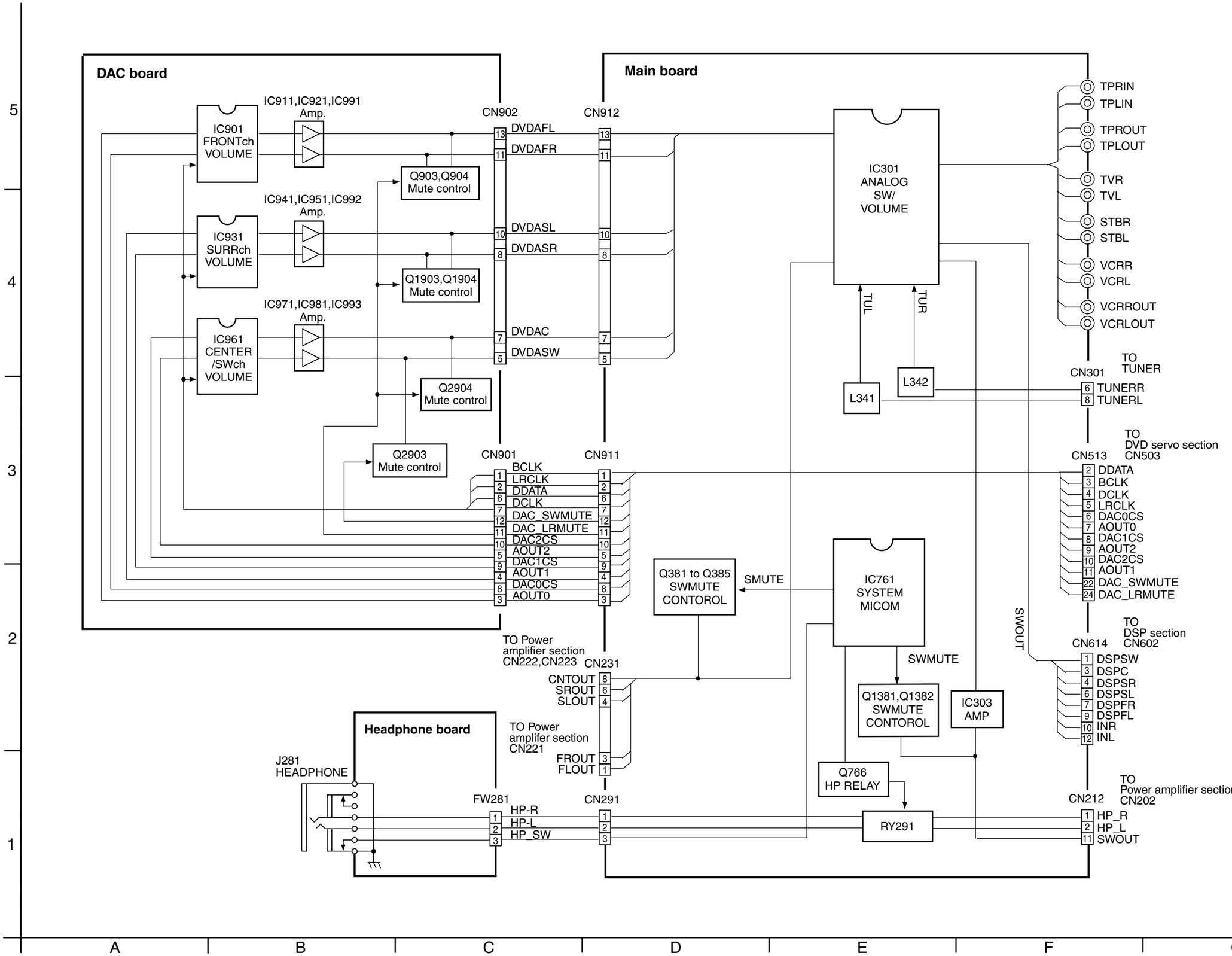
■ Power supply section



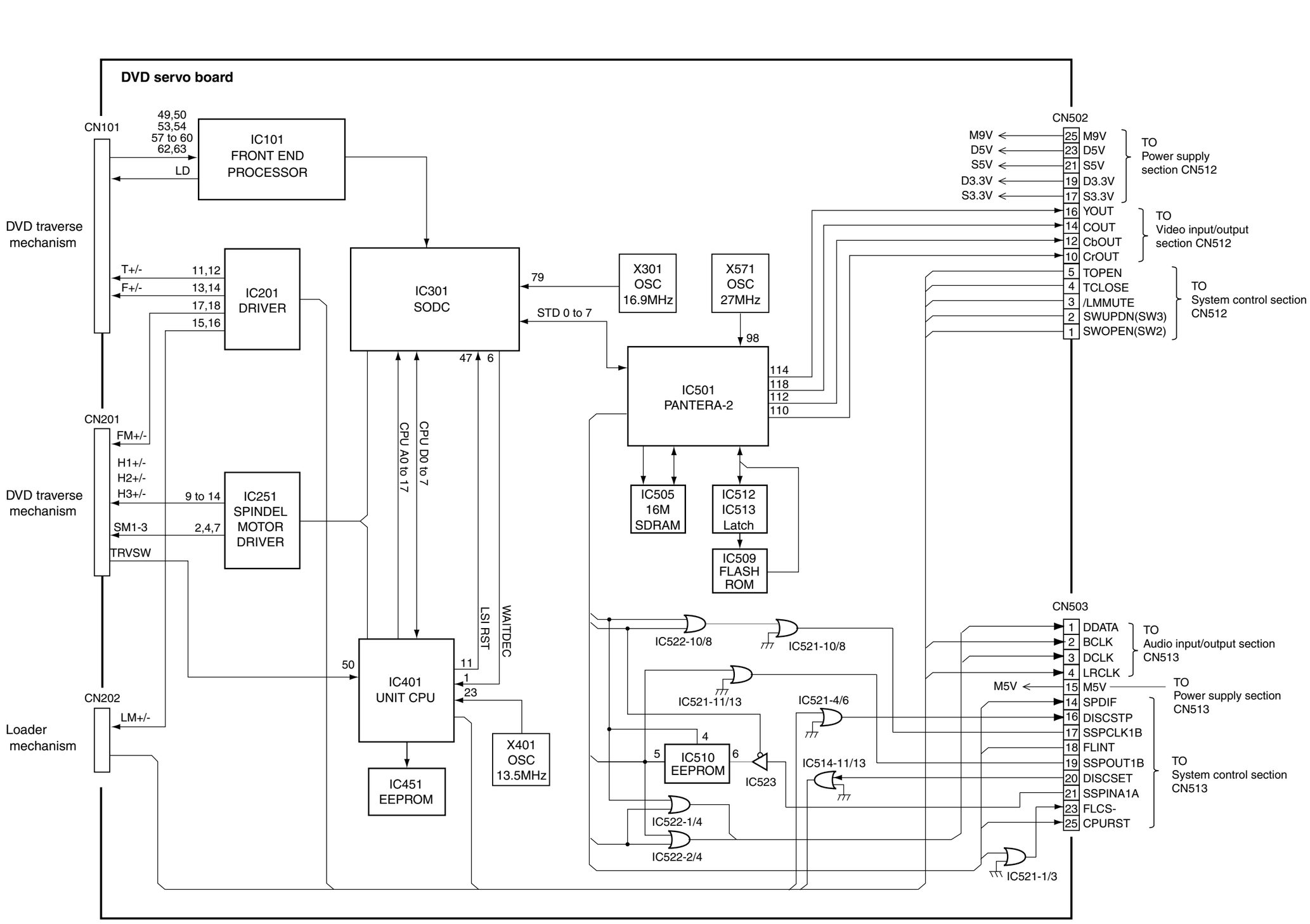
■ FL display section



■ Audio input/output section

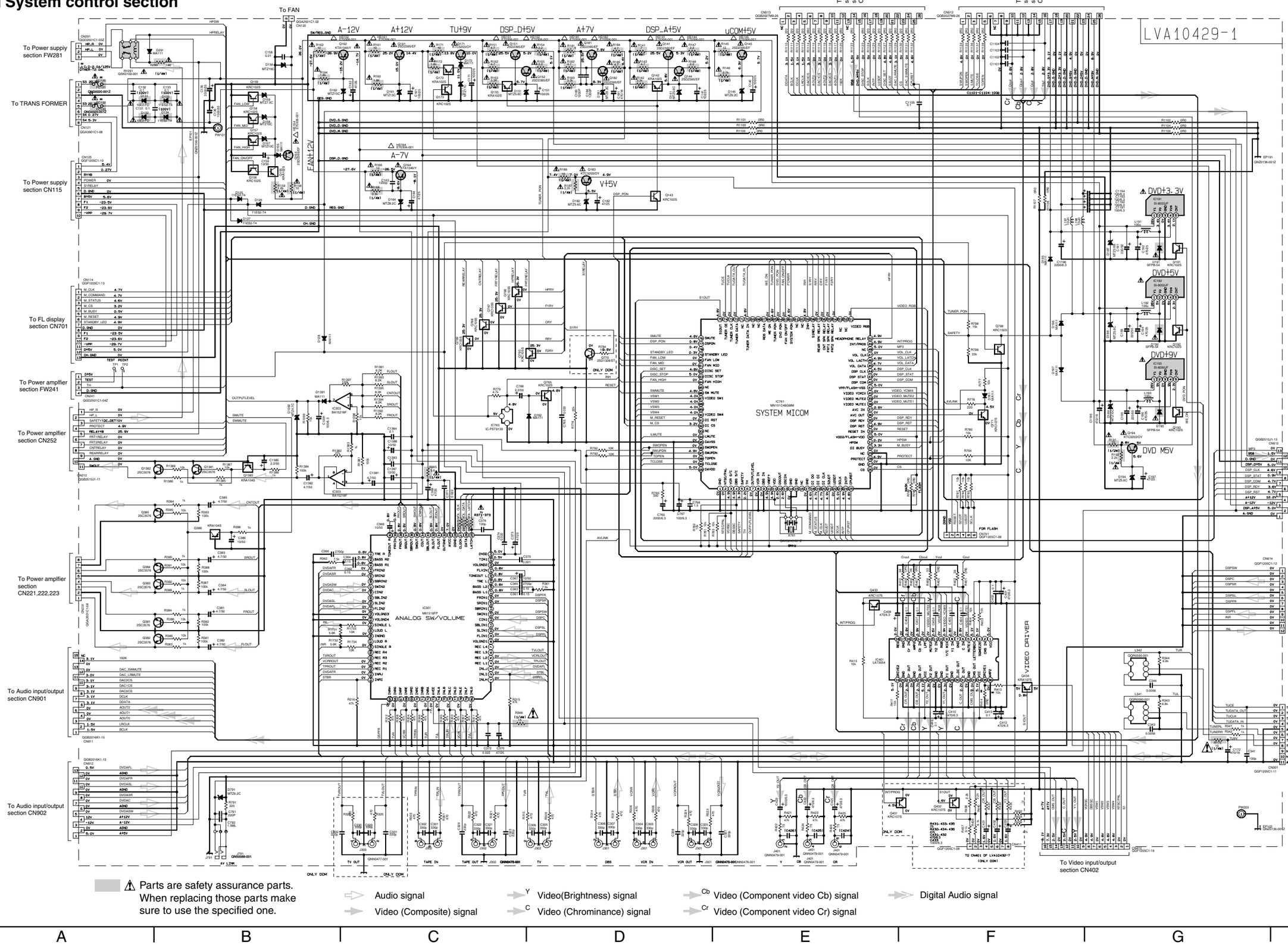


■ DVD servo section



Standard schematic diagrams

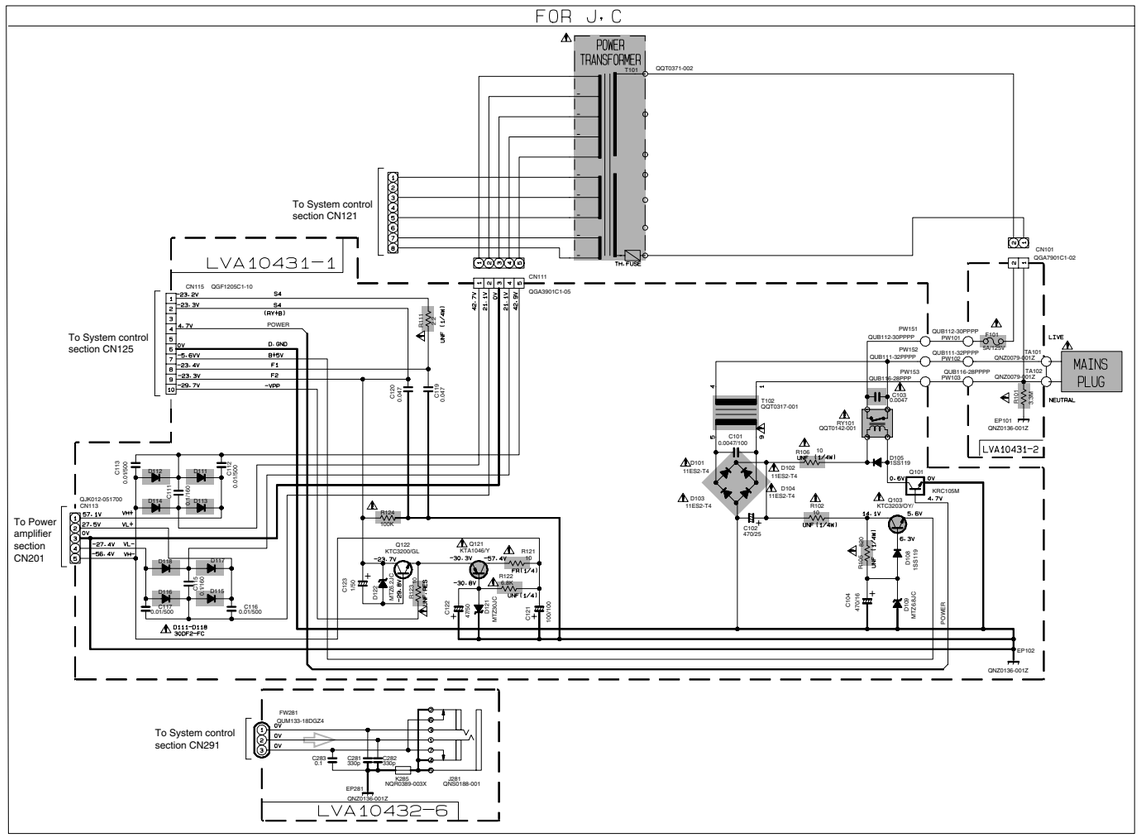
■ System control section



⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Audio signal
Video (Composite) signal
Y Video(Brightness) signal
C Video (Chrominance) signal
Cb Video (Component video Cb) signal
Cr Video (Component video Cr) signal
Digital Audio signal

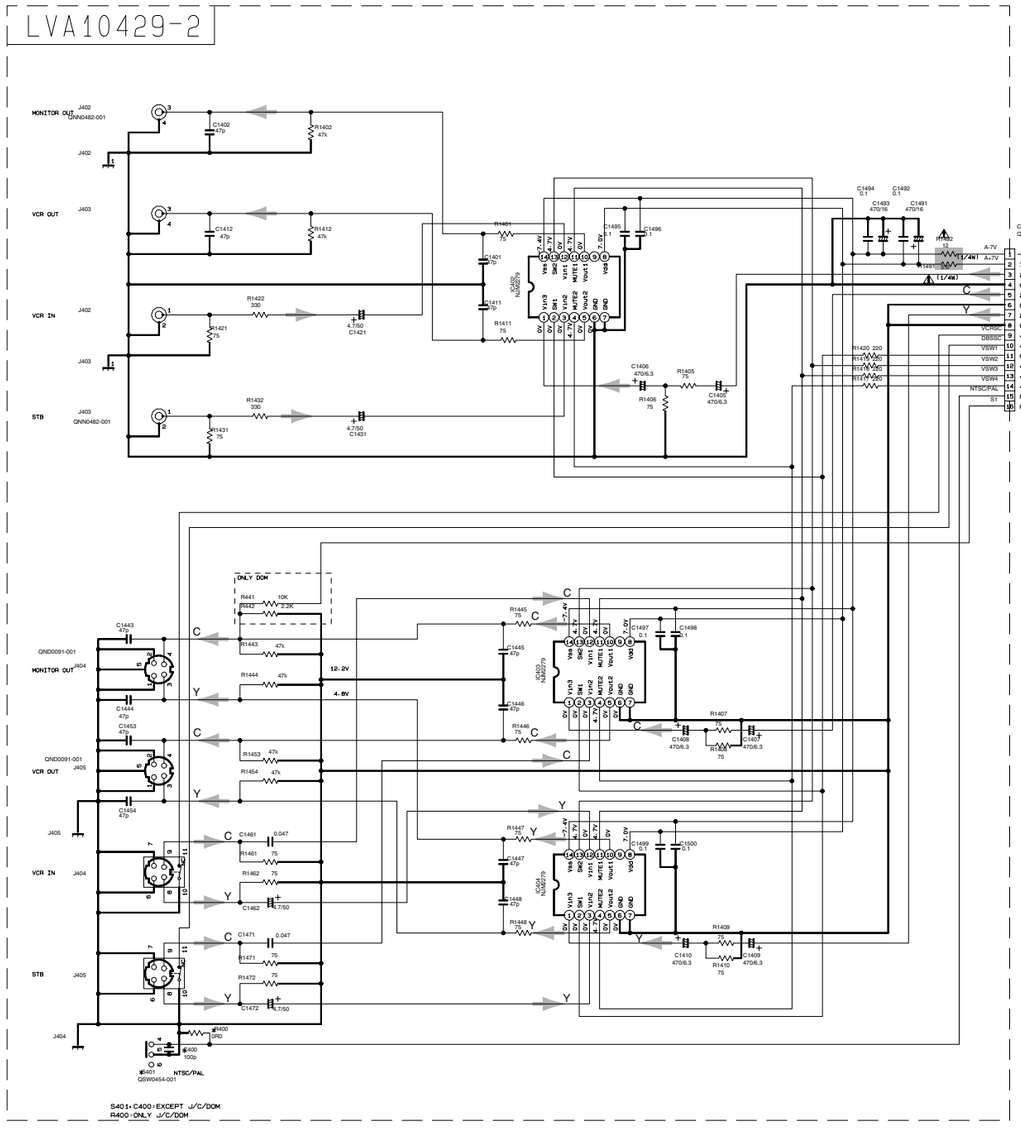
■ Power supply section



Audio signal

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ Video input/output section



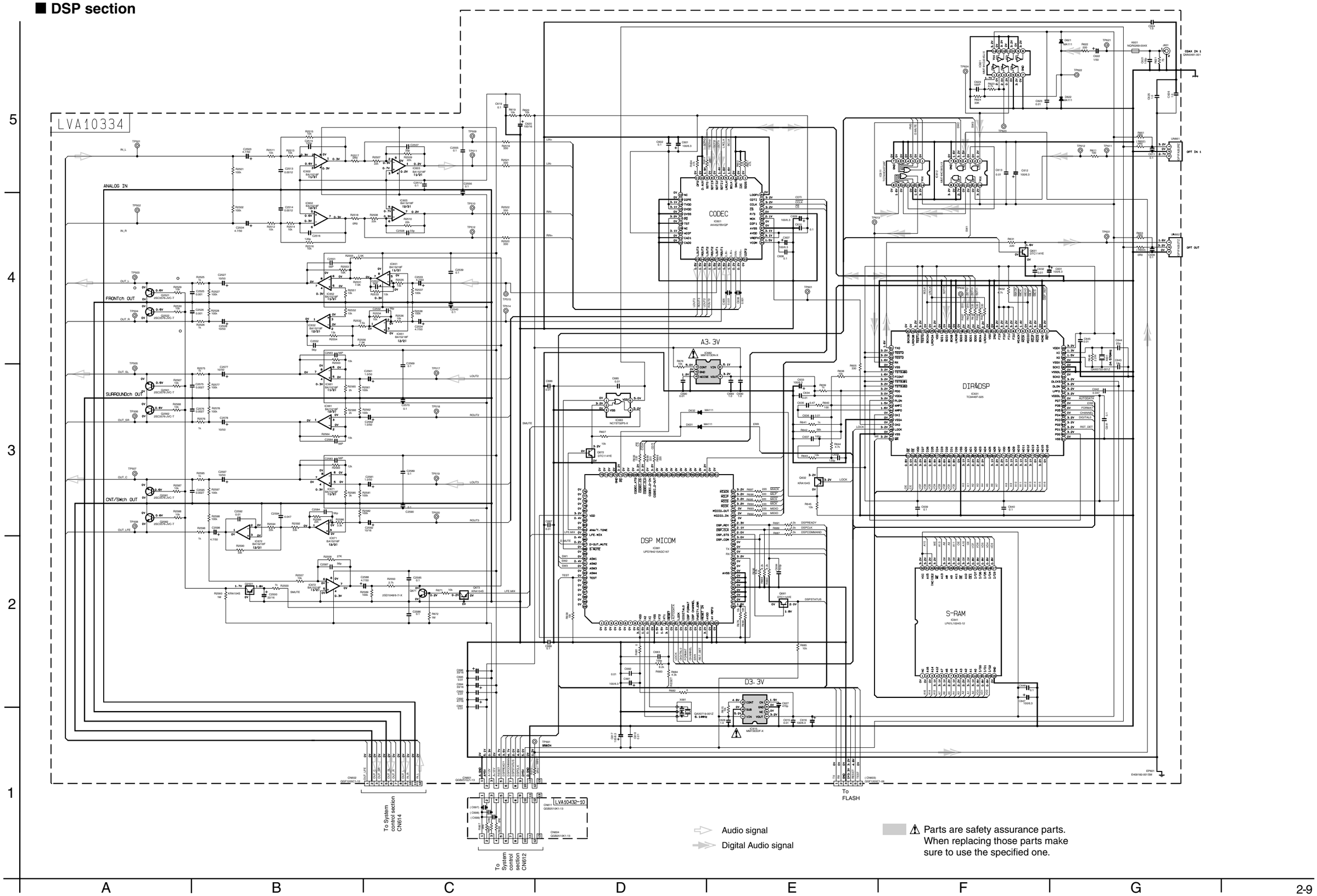
Video (Composite) signal

Video (Brightness) signal

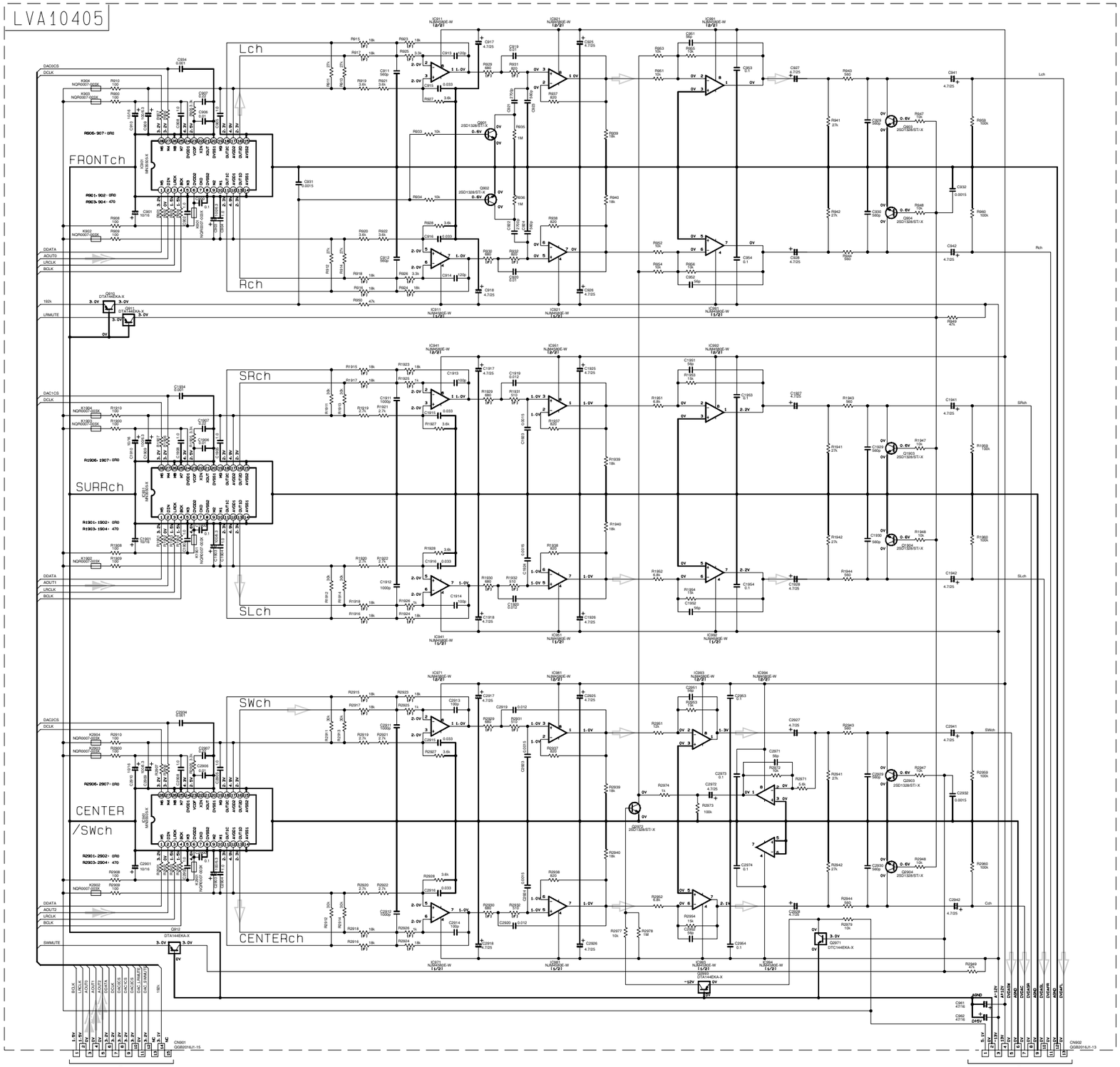
Video (Chrominance) signal

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

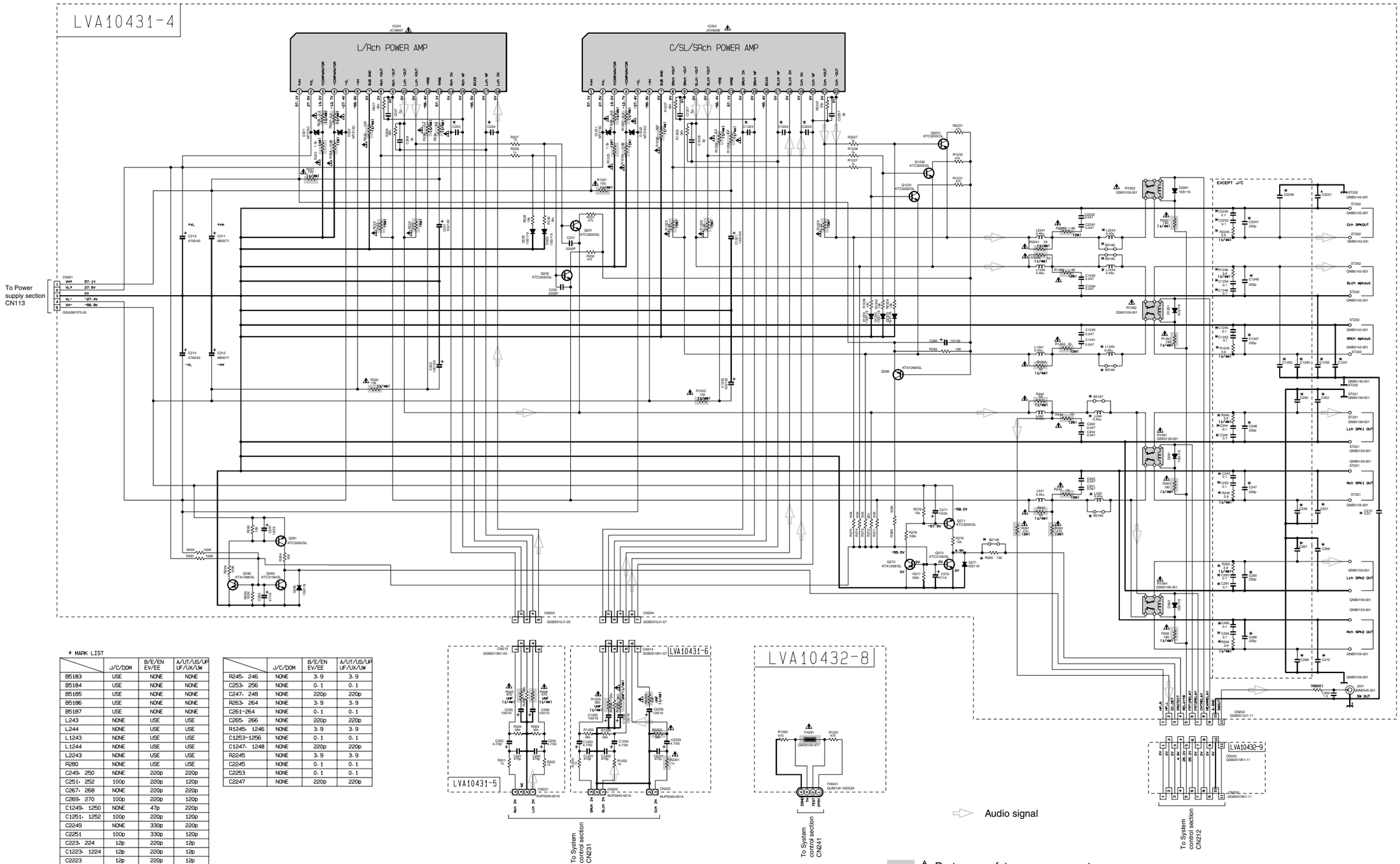
■ DSP section


LVA10334
ANALOG IN
FRONTch OUT
SURROUNDch OUT
CNT/SWch OUT
CODEC
IC601
AK4527BVQP
DSP MICOM
IC681
UPD79421GAC167
DIR&DSP
IC631
TC9446F/025
S-RAM
IC641
LFE51L02AS-12
A3.3V
D3.3V
DSPREADY
DSPCLK
DSPCOMMAND
DSPSTATUS
COAX IN 1
OPT IN 1
OPT OUT
To FLASH
To System control section CN614
To System control section CN612
LVA10432-10
Audio signal
Digital Audio signal
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ Audio input/output section



■ Power amplifier section



* MARK LIST

	J/C/DOM	B/E/EN EV/EE	A/UT/US/UP UF/UX/UW
B5183	USE	NONE	NONE
B5184	USE	NONE	NONE
B5185	USE	NONE	NONE
B5186	USE	NONE	NONE
B5187	USE	NONE	NONE
L243	NONE	USE	USE
L244	NONE	USE	USE
L1243	NONE	USE	USE
L1244	NONE	USE	USE
L2243	NONE	USE	USE
R280	NONE	USE	USE
C249, 250	NONE	220p	220p
C251, 252	100p	220p	120p
C267, 268	NONE	220p	220p
C269, 270	100p	220p	120p
C1249, 1250	NONE	47p	220p
C1251, 1252	100p	220p	120p
C2249	NONE	330p	220p
C2251	100p	330p	120p
C223, 224	12p	220p	12p
C1223, 1224	12p	220p	12p
C2223	12p	220p	12p

	J/C/DOM	B/E/EN EV/EE	A/UT/US/UP UF/UX/UW
R245, 246	NONE	3.9	3.9
C253, 256	NONE	0.1	0.1
C247, 248	NONE	220p	220p
R263, 264	NONE	3.9	3.9
C261-264	NONE	0.1	0.1
C265, 266	NONE	220p	220p
R1245, 1246	NONE	3.9	3.9
C1253-1256	NONE	0.1	0.1
C1247, 1248	NONE	220p	220p
R2245	NONE	3.9	3.9
C2245	NONE	0.1	0.1
C2253	NONE	0.1	0.1
C2247	NONE	220p	220p

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ DVD servo section 1/4

LVA10298-B1(1/3)

TO DVD TRAVERSE MECHA (FMU-DV3) ELM-V72-1C / ELM-V73-1C (FMU-DV31/5/35)

TO DVD LOADER MECHA FLM-J1-2C

IC101 AN6703FH-V FRONT END PROCESSOR

IC251 BA6664FM-X SP MOTOR DRIVER

IC287 BA6685FM-X DRIVER

IC301 MN101D52EGA SODC

IC401 UNIT CPU

X401 NAX8543-001X 13.5MHz

X301 16.9MHz

MODEL	R403	R405
FMU-DV3	NI	NI
FMU-DV31	NI	0R0
FMU-DV35	NI	0R0
FMU-DV5	0R0	0R0

To DVD servo section 2/4

To DVD servo section 2/4

MODEL FMU-DV5 ONLY

Digital data signal

■ DVD servo section 2/4

LVA10298-B1(2/3)

To DVD servo section 1/4

SRST
REQ
DECIRQ
SSCLKO
SSPINO
SSPOUTO

AVRTM
STCLK
STVALID
STEN
STD0~STD7

FLCS3V
RCK
DAC0CS
DAC1CS
DAC2CS
X6
RGB
NTB
DACDENA
CPURST
SRST
FLINT
BUSY
SWMUTE

To DVD servo section 3/4

IC501
FMU-DV3/DV31/DV35 NDV8601VWA-BB
FMU-DV5 NDV8611VWA

PANTERA-2

RD
ALE
PWE0
AD0~AD31
PWE1
PWE2
PWE3
ACK
SCLK

PCS0
LHLD
LHLDA
LA0~LA3
ALE
RD~
ACK
SCLK
PWE0~PWE3
AD0~AD31

To DVD servo section 3/4

Cr-OUT
CbOUT
YOUT
COUT

To DVD servo section 3/4

192K
SMUTE
LRMUTE
SIOUT
SSPCLK1
SSPOUT1
SSPIN1
LRCLK
BCK
AOUT0~AOUT3
SPDIF

To DVD servo section 3/4

DISCSTP3V
DISCSET3V
MECHA_H/V
TOPEN
TCLOSE
/LMMUTE
SWOPEN
SWUPON

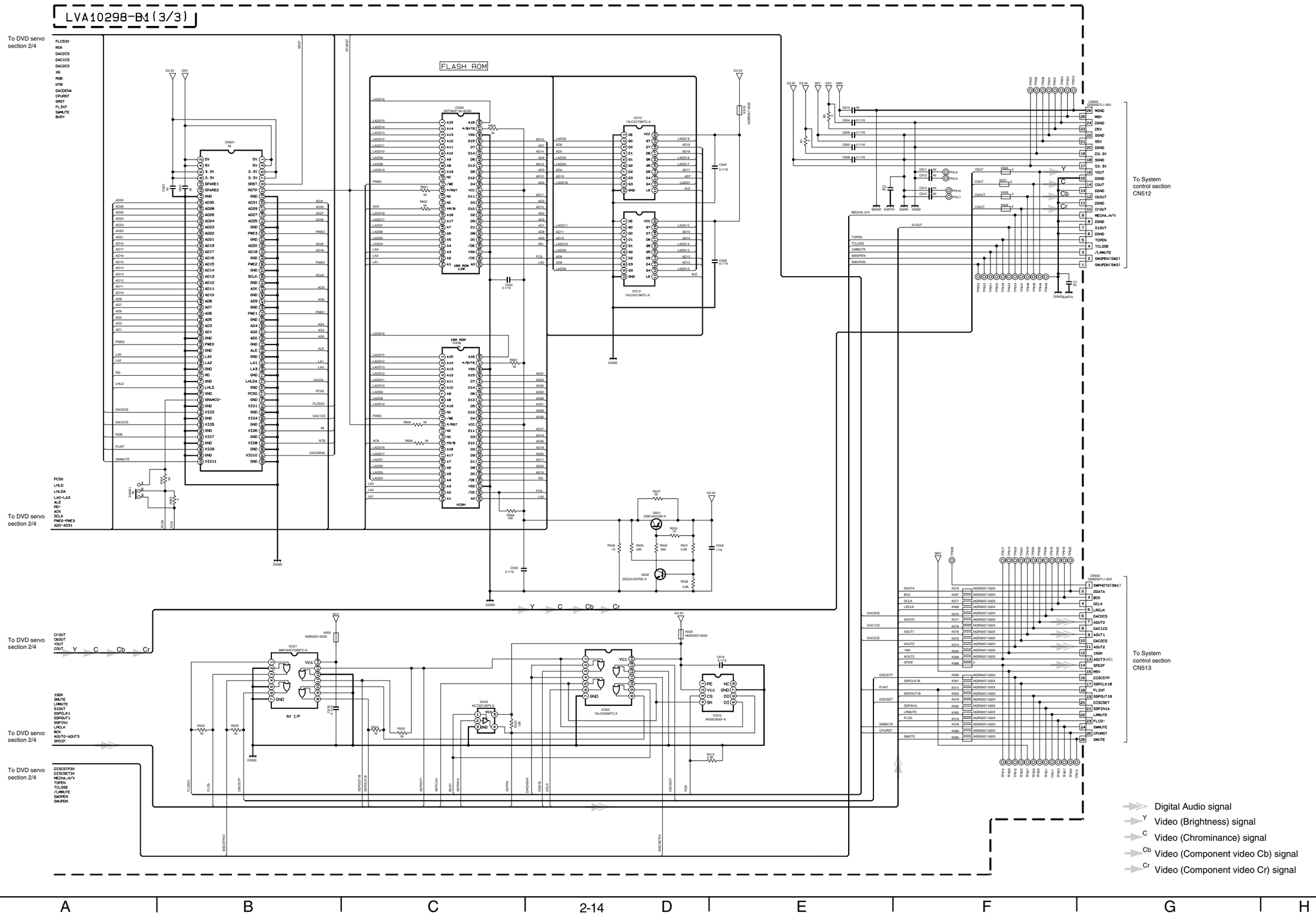
To DVD servo section 3/4

TOPEN
TCLOSE
/LMMUTE
SWOPEN
SWUPON
MECHA_H/V
DISCSTP3V
DISCSET3V

To DVD servo section 1/4

Digital data signal
Digital Audio signal
Y Video (Brightness) signal
C Video (Chrominance) signal
Cb Video (Component video Cb) signal
Cr Video (Component video Cr) signal

■ DVD servo section 3/4



■ DVD servo section 4/4 (Voltage value)

IC101

NO	DC(V)	NO	DC(V)
1	0V	51	2.1V
2	4.4V	52	2.1V
3	3.7V	53	2.1V
4	4.4V	54	2.1V
5	0V	55	4.9V
6	1.7V	56	2.1V
7	1.7V	57	2.1V
8	1.9V	58	2.1V
9	3.3V	59	2.1V
10	0V	60	2.1V
11	3.3V	61	0V
12	3.3V	62	2.1V
13	3.3V	63	2.1V
14	3.3V	64	0V
15	0V		
16	1.7V		
17	1.5V		
18	1.7V		
19	1.7V		
20	0V		
21	1.7V		
22	0V		
23	1.7V		
24	0.9V		
25	1.7V		
26	0V		
27	0V		
28	4.9V		
29	1.7V		
30	0V		
31	0V		
32	0V		
33	0V		
34	0V		
35	0.9V		
36	3.3V		
37	1.3V		
38	0.9V		
39	3.3V		
40	3.3V		
41	1.7V		
42	1.7V		
43	1.7V		
44	1.0V		
45	1.7V		
46	2.1V		
47	2.1V		
48	2.1V		
49	2.1V		
50	2.1V		

IC201

NO	DC(V)
1	1.7V
2	1.7V
3	1.7V
4	1.7V
5	1.7V
6	1.7V
7	1.7V
8	0V
9	3.2V
10	5.0V
11	2.5V
12	2.5V
13	2.5V
14	2.5V
15	4.3V
16	4.3V
17	4.3V
18	4.3V
19	9.2V
20	0V
21	0V
22	1.7V
23	1.7V
24	1.7V
25	0V
26	0V
27	1.7V
28	9.2V
29	1.7V
30	9.2V

IC251

NO	DC(V)
1	0.8V
2	0.8V
3	0.8V
4	0.8V
5	0V
6	0V
7	0.8V
8	0V
9	5.0V
10	5.0V
11	5.0V
12	5.0V
13	5.0V
14	5.0V
15	0V
16	0V
17	0V
18	0V
19	5.0V
20	5.0V
21	1.67V
22	1.67V
23	0V
24	3.3V
25	5.0V
26	0V
27	9.2V
28	9.2V
29	0V
30	0V

IC301

NO	DC(V)	NO	DC(V)	NO	DC(V)	NO	DC(V)
1	0V	51	3.3V	101	0.7V	151	0V
2	2.9V	52	3.3V	102	0V	152	1.7V
3	3.3V	53	——	103	1.4V	153	0V
4	0V	54	——	104	2.1V	154	1.7V
5	3.3V	55	——	105	——	155	0V
6	3.3V	56	——	106	1.7V	156	3.3V
7	——	57	3.3V	107	0.7V	157	0V
8	0V	58	1.7V	108	0.7V	158	0V
9	0V	59	0V	109	3.3V	159	0V
10	0V	60	0V	110	1.7V	160	0V
11	3.3V	61	——	111	1.7V	161	0V
12	3.3V	62	——	112	0V	162	3.3V
13	3.3V	63	——	113	0V	163	0V
14	0V	64	——	114	1.7V	164	0V
15	1.4V	65	1.7V	115	1.7V	165	0V
16	0.3V	66	1.7V	116	3.3V	166	0V
17	1.4V	67	1.7V	117	1.7V	167	0V
18	1.7V	68	1.7V	118	1.7V	168	0V
19	0V	69	3.3V	119	1.7V	169	3.3V
20	1.7V	70	——	120	1.7V	170	0V
21	0V	71	——	121	2.1V	171	0V
22	2.2V	72	——	122	1.7V	172	3.3V
23	2.2V	73	——	123	2.1V	173	0V
24	1.7V	74	——	124	——	174	4.9V
25	1.5V	75	——	125	3.3V	175	4.9V
26	1.5V	76	1.7V	126	0V	176	3.3V
27	1.5V	77	0V	127	0V		
28	1.5V	78	3.3V	128	0V		
29	1.5V	79	1.7V	129	0V		
30	0.5V	80	——	130	0V		
31	3.3V	81	0V	131	3.3V		
32	0V	82	0.8V	132	0V		
33	3.3V	83	2.1V	133	0V		
34	3.3V	84	1.7V	134	0V		
35	3.3V	85	0V	135	0V		
36	3.3V	86	——	136	1.7V		
37	0V	87	——	137	3.3V		
38	0V	88	3.3V	138	0V		
39	0V	89	0V	139	3.3V		
40	0V	90	1.7V	140	0V		
41	0V	91	——	141	0V		
42	0V	92	——	142	0V		
43	1.0V	93	1.7V	143	3.3V		
44	0V	94	0V	144	0V		
45	——	95	——	145	——		
46	0V	96	1.7V	146	1.7V		
47	3.3V	97	1.7V	147	3.3V		
48	0V	98	——	148	——		
49	——	99	3.3V	149	0V		
50	——	100	0.7V	150	0V		

IC401

NO	DC(V)	NO	DC(V)
1	3.3V	51	——
2	3.3V	52	0V
3	0V	53	3.3V
4	3.3V	54	3.3V
5	——	55	3.3V
6	3.3V	56	3.3V
7	——	57	——
8	0V	58	3.3V
9	3.3V	59	0V
10	0V	60	——
11	3.3V	61	0V
12	3.3V	62	0V
13	1.5V	63	0V
14	1.5V	64	0V
15	1.5V	65	0V
16	1.5V	66	3.3V
17	3.3V	67	3.3V
18	——	68	0V
19	0V	69	3.3V
20	0V	70	3.3V
21	——	71	0V
22	3.3V	72	3.3V
23	1.7V	73	3.3V
24	1.7V	74	3.3V
25	5.0V	75	3.3V
26	3.3V	76	3.3V
27	0V	77	0V
28	3.3V	78	0V
29	3.3V	79	0V
30	3.3V	80	0V
31	3.3V	81	3.3V
32	0V	82	3.3V
33	3.3V	83	3.3V
34	3.3V	84	3.3V
35	0V	85	3.3V
36	3.3V	86	3.3V
37	3.3V	87	3.3V
38	3.3V	88	3.3V
39	0V	89	3.3V
40	0V	90	3.3V
41	——	91	3.3V
42	——	92	0V
43	0V	93	0V
44	——	94	0V
45	3.3V	95	0V
46	0V	96	0V
47	0V	97	0V
48	3.3V	98	0V
49	3.3V	99	0V
50	3.3V	100	0V

IC451

NO	DC(V)
1	0V
2	3.2V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V

IC501

NO	DC(V)	NO	DC(V)	NO	DC(V)	NO	DC(V)	NO	DC(V)
1	3.2V	53	3.2V	105	0V	157	0V	209	0V
2	0.5V	54	0.4V	106	0V	158	0V	210	3.2V
3	0.4V	55	0.4V	107	3.2V	159	1.7V	211	0V
4	1.8V	56	0.4V	108	1.7V	160	1.7V	212	1.7V
5	0.4V	57	0V	109	0V	161	3.2V	213	3.2V
6	0V	58	0.4V	110	0V	162	0V	214	3.2V
7	0.4V	59	0.4V	111	1.0V	163	0V	215	0V
8	0.4V	60	0.4V	112	1.0V	164	0V	216	0V
9	0V	61	0.5V	113	3.1V	165	0V	217	3.2V
10	3.2V	62	3.2V	114	0.4V	166	0V	218	0V
11	0V	63	0.5V	115	0.4V	167	0V	219	3.2V
12	0V	64	3.2V	116	——	168	0V	220	3.2V
13	0V	65	1.0V	117	3.1V	169	3.2V	221	0V
14	0V	66	——	118	0.8V	170	3.2V	222	3.2V
15	2.0V	67	0V	119	1.3V	171	0V	223	3.2V
16	1.3V	68	1.7V	120	1.8V	172	0V	224	3.2V
17	0V	69	0V	121	0V	173	0V	225	0V
18	0.4V	70	3.2V	122	0V	174	0V	226	0V
19	3.2V	71	0V	123	0V	175	0V	227	0.8V
20	1.4V	72	0V	124	0V	176	0V	228	0V
21	1.7V	73	0V	125	3.2V	177	0V	229	0.8V
22	1.7V	74	0V	126	0V	178	0V	230	0V
23	0V	75	3.2V	127	0V	179	0V	231	0.8V
24	3.2V	76	——	128	0V	180	0V	232	0.6V
25	0.5V	77	1.7V	129	0V	181	3.2V	233	3.2V
26	2.5V	78	1.7V	130	0V	182	3.2V	234	0.6V
27	3.2V	79	1.7V	131	0V	183	0V	235	0.8V
28	1.2V	80	0V	132	0V	184	0V	236	1.0V
29	0V	81	0V	133	0V	185	3.2V	237	0V
30	0V	82	0V	134	0V	186	0V	238	0.4V
31	0V	83	3.2V	135	1.8V	187	0V	239	0.8V
32	2.0V	84	0.4V	136	0V	188	0V	240	0.8V
33	1.3V	85	0V	137	0V	189	3.2V		
34	1.7V	86	3.2V	138	0V	190	0V		
35	2.2V	87	0V	139	0V	191	0V		
36	3.1V	88	1.7V	140	3.2V	192	1.7V		
37	3.2V	89	0V	141	0V	193	3.2V		
38	0V	90	0V	142	0V	194	3.2V		
39	3.2V	91	1.2V	143	0V	195	0V		
40	0V	92	0V	144	0V	196	3.2V		
41	0V	93	0V	145	3.2V	197	3.2V		
42	0V	94	0.6V	146	0V	198	3.2V		
43	0.7V	95	0V	147	0V	199	3.2V		
44	3.2V	96	0V	148	0V	200	3.2V		
45	0.7V	97	0V	149	0V	201	0V		
46	0.5V	98	1.7V	150	0V	202	3.2V		
47	0V	99	——	151	0V	203	3.2V		
48	0.5V	100	——	152	0V	204	0V		
49	0V	101	1.7V	153	0V	205	4.9V		
50	0.4V	102	3.2V	154	3.2V	206	3.2V		
51	0.4V	103	0V	155	0V	207	0V		
52	0.4V	104	0V	156	3.2V	208	3.2V		

IC502

NO	DC(V)
1	1.5V
2	3.3V
3	1.7V
4	0V
5	1.7V
6	1.7V
7	1.7V
8	1.7V

IC505

NO	DC(V)	NO	DC(V)
1	3.2V	51	0.5V
2	0.8V	52	0V
3	3.2V	53	0.5V
4	0.8V	54	0.7V
5	0.8V	55	3.2V
6	0V	56	0.7V
7	0.6V	57	0.6V
8	0.6V	58	0V
9	3.2V	59	0V
10	0.8V	60	1.7V
11	1.0V	61	1.4V
12	0V	62	0.4V
13	0.4V	63	1.3V
14	——	64	1.3V
15	3.2V	65	2.0V
16	0V	66	0V
17	3.2V	67	3.2V
18	0V	68	1.7V
19	3.2V	69	——
20	2.2V	70	——
21	——	71	0V
22	2.0V	72	0V
23	1.3V	73	——
24	0V	74	0V
25	1.2V	75	3.2V
26	2.5V	76	0.4V
27	0.5V	77	0.4V
28	1.0V	78	0V
29	3.2V	79	0V
30	——	80	0.4V
31	0.4V	81	3.2V
32	0V	82	0.5V
33	0.4V	83	0.8V
34	0.4V	84	0V
35	3.2V	85	0.8V
36	0.4V	86	0V
37	0.4V	87	
38	0V	88	
39	0.5V	89	
40	0.5V	90	
41	3.2V	91	
42	3.2V	92	
43	3.2V	93	
44	0V	94	
45	0.4V	95	
46	0V	96	
47	0.4V	97	
48	0.4V	98	
49	3.2V	99	
50	0.4V	100	

IC509

NO	DC(V)
1	0V
2	0V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	——
11	3.2V
12	0V
13	——
14	——
15	0V
16	0V
17	0V
18	0V
19	0V
20	0V
21	0V
22	0V
23	0V
24	3.2V
25	0V
26	3.2V
27	0V
28	3.2V
29	0V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	0V
37	3.2V
38	0V
39	0V
40	0V
41	0V
42	0V
43	0V
44	0V
45	0V
46	0V
47	0V
48	0V

IC510

NO	DC(V)
1	0V
2	3.2V
3	0V
4	3.2V
5	3.2V
6	3.2V
7	0V
8	0V

IC511

NO	DC(V)
1	0V
2	1.8V
3	3.2V

IC512

NO	DC(V)
1	0V
2	0V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	0V
16	0V
17	0V
18	0V
19	0V
20	3.2V

IC513

NO	DC(V)
1	0V
2	0V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	0V
16	0V
17	0V
18	0V
19	0V
20	3.2V

IC521

NO	DC(V)
1	3.2V
2	0V
3	5.0V
4	3.2V
5	0V
6	5.0V
7	0V
8	5.0V
9	0V
10	3.2V
11	5.0V
12	0V
13	3.2V
14	5.0V

IC522

NO	DC(V)
1	3.2V
2	3.2V
3	3.2V
4	3.2V
5	3.2V
6	3.2V
7	0V
8	0V
9	3.2V
10	3.2V
11	3.2V
12	0V
13	5.0V
14	3.2V

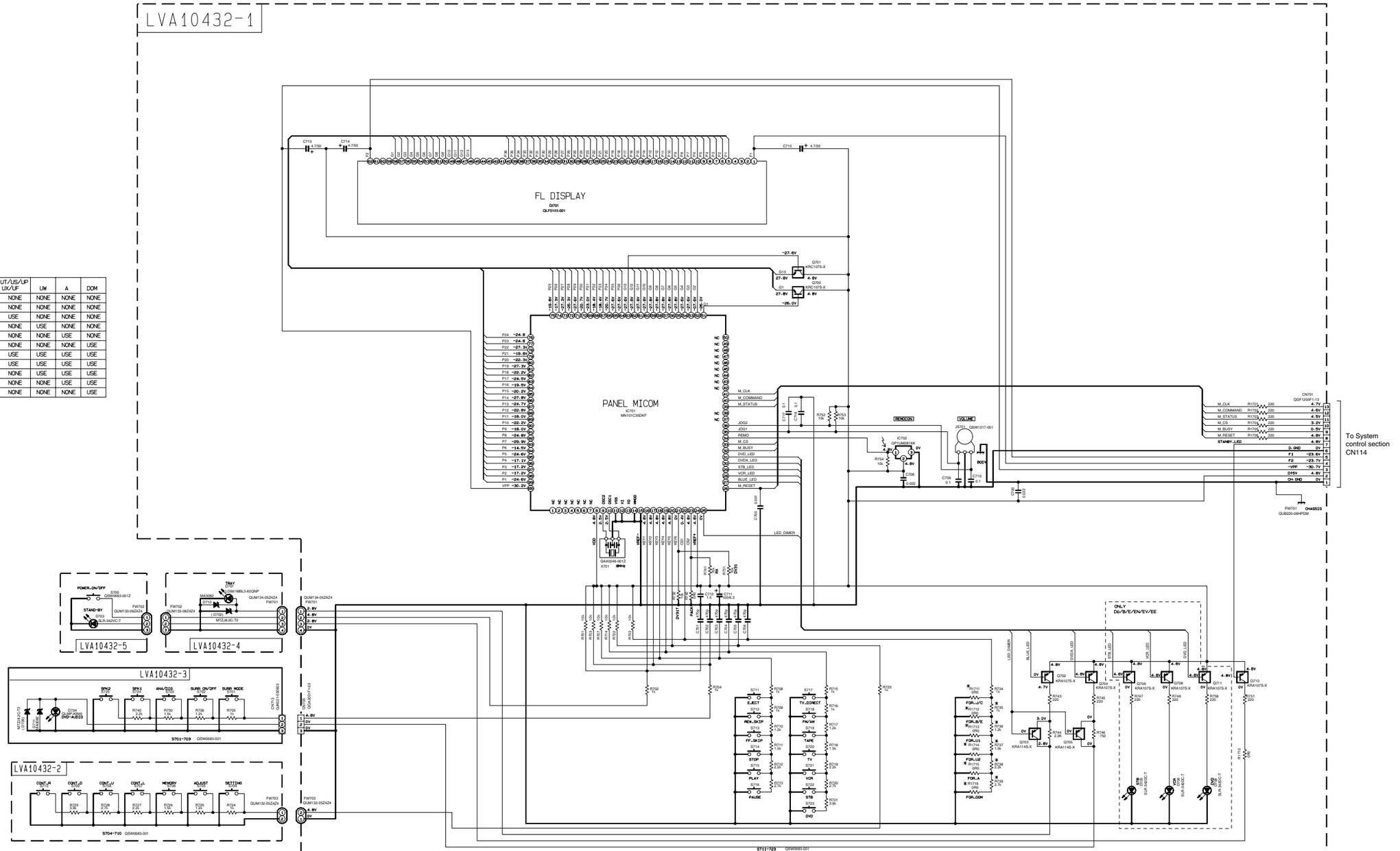
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION --- POWER ON DVD STOP

■ FL display section

* MARK LIST

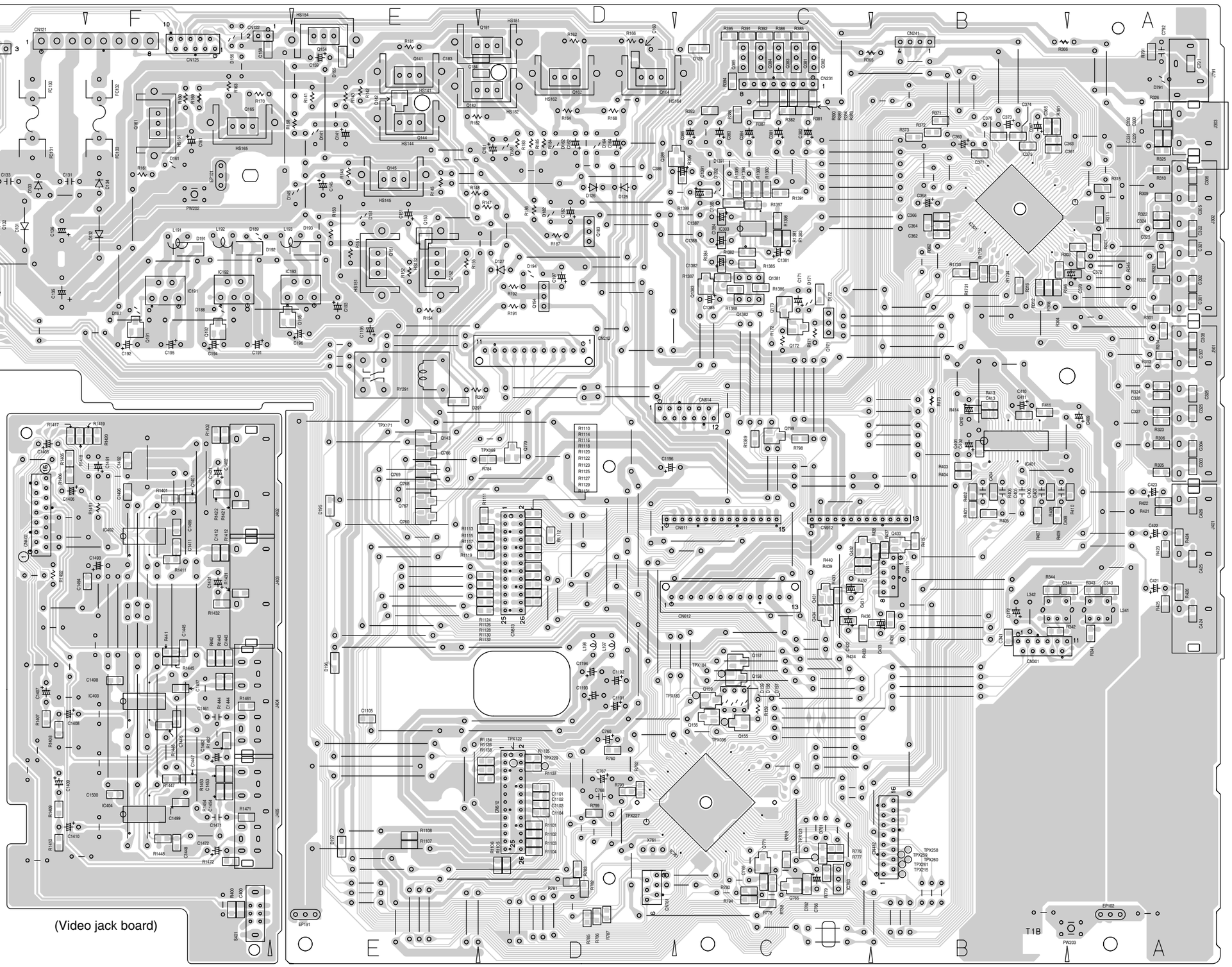
	J/C	B/E/EN EV/EE	UT/US/UP UX/UF	UW	A	DOM
R1711	USE	NONE	NONE	NONE	NONE	NONE
R1712	NONE	USE	NONE	NONE	NONE	NONE
R1713	NONE	NONE	USE	NONE	NONE	NONE
R1714	NONE	NONE	NONE	USE	NONE	NONE
R1715	NONE	NONE	NONE	NONE	USE	NONE
R1716	NONE	NONE	NONE	NONE	NONE	USE
R735	NONE	USE	USE	USE	USE	USE
R736	NONE	NONE	USE	USE	USE	USE
R737	NONE	NONE	NONE	USE	USE	USE
R738	NONE	NONE	NONE	NONE	USE	USE
R739	NONE	NONE	NONE	NONE	NONE	USE



Printed circuit boards

■ Main board

(Main board)



(Video jack board)

■ Amp board

(Sub trans. board)

(Power board)

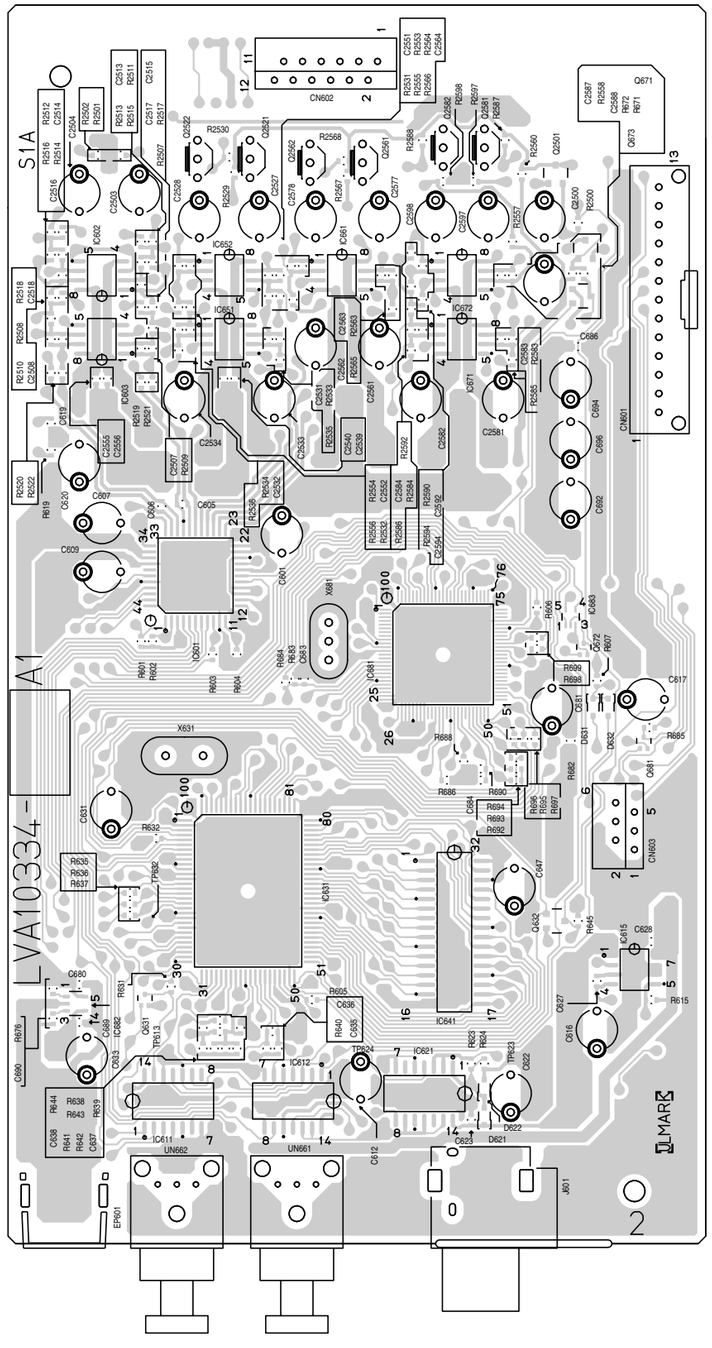
(Amp. sub(a) board)

(Amp. sub(b) board)

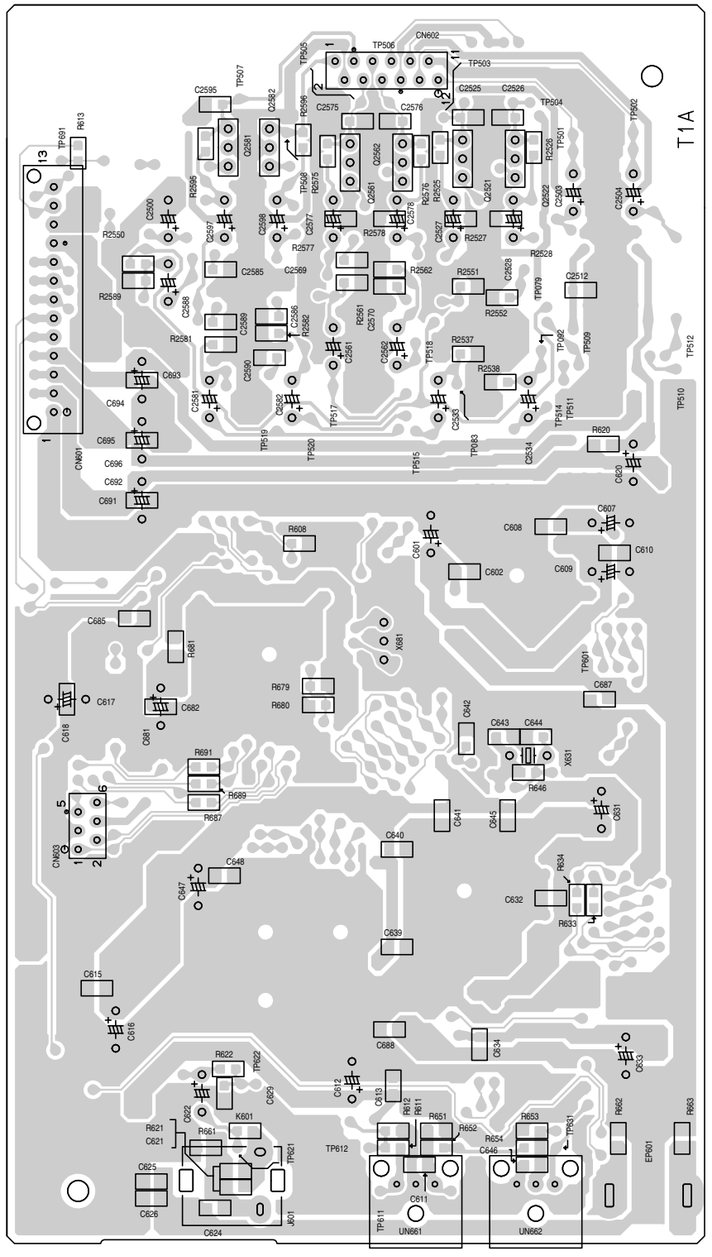
(Amp. board)

■ DSP board

Forward side

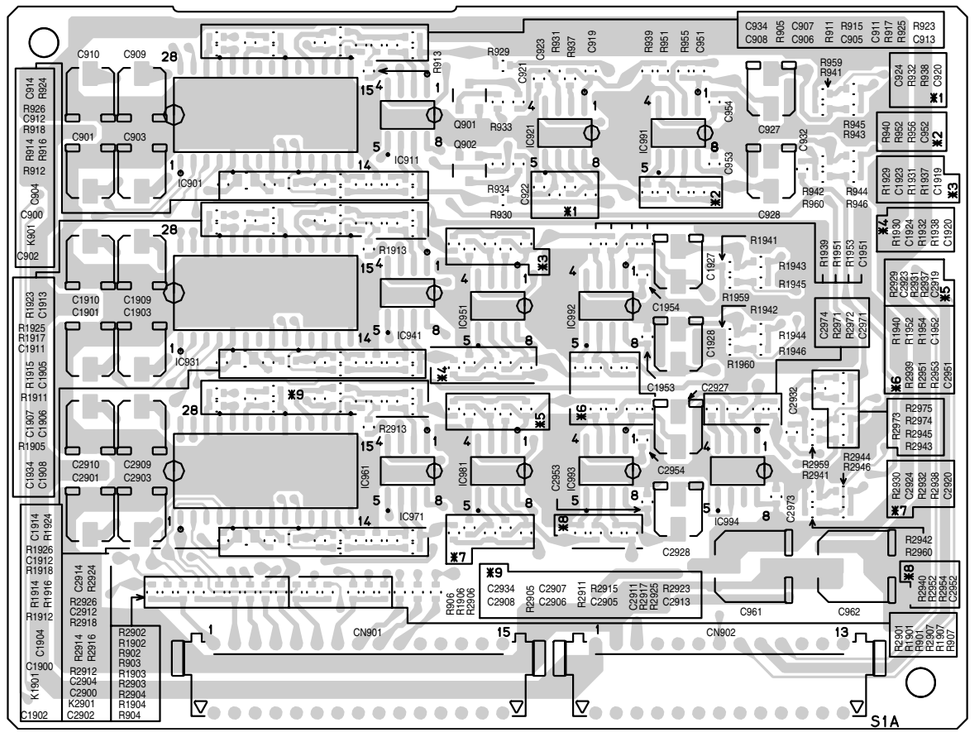


Reverse side

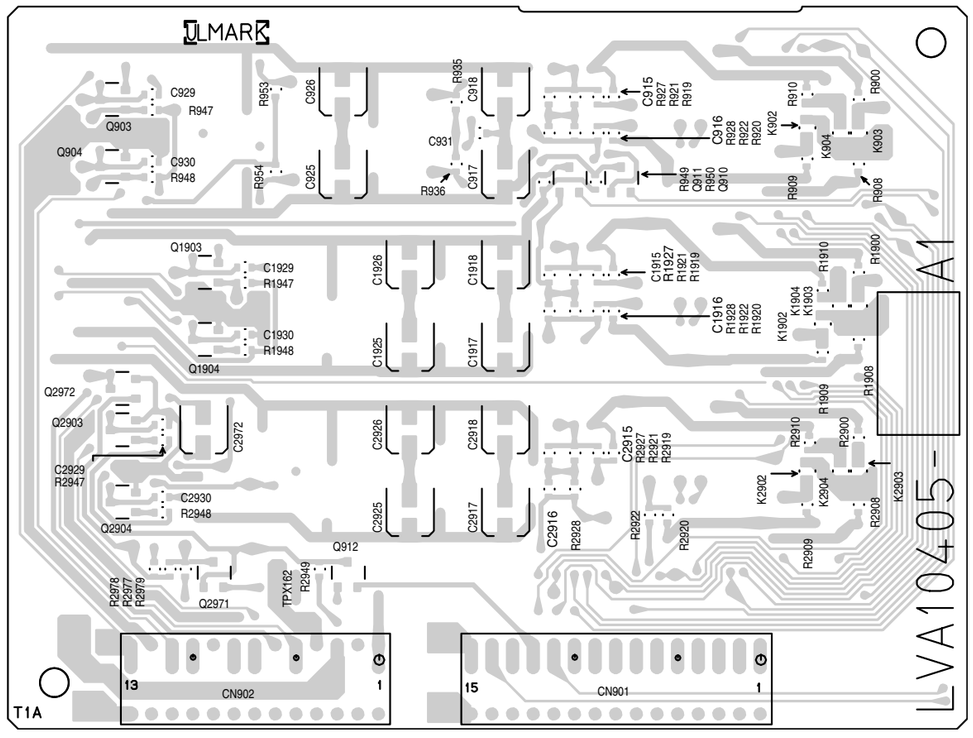


■ DAC board

Forward side

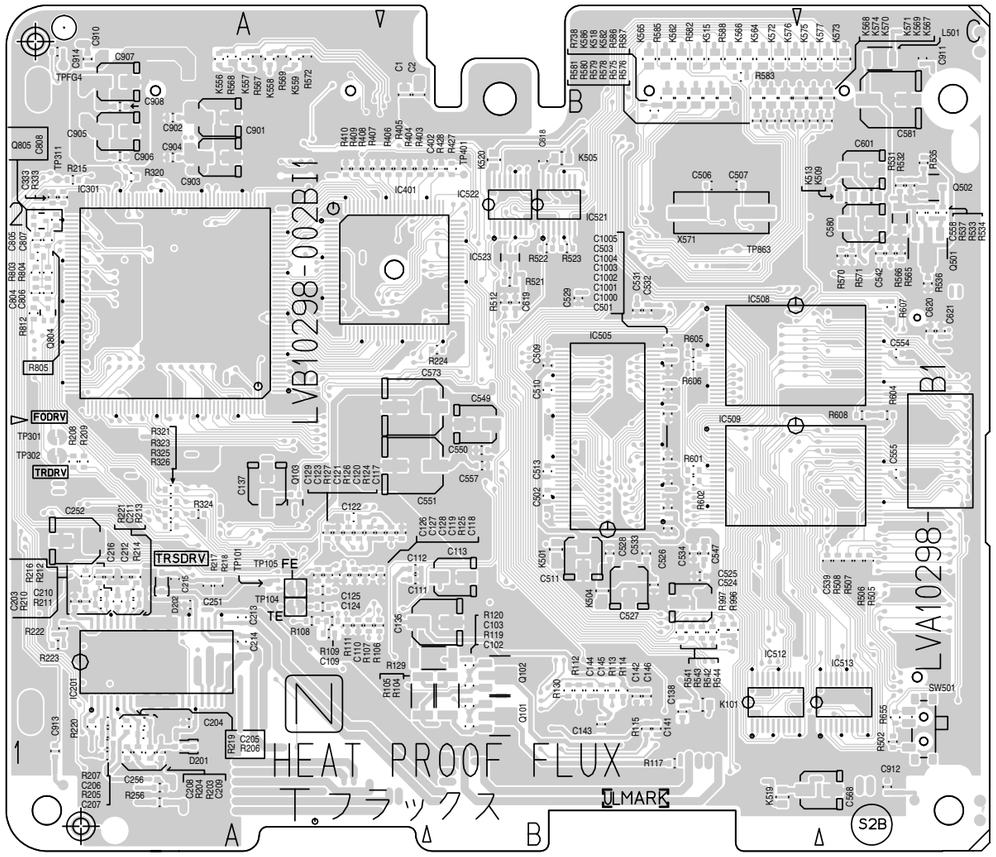


Reverse side

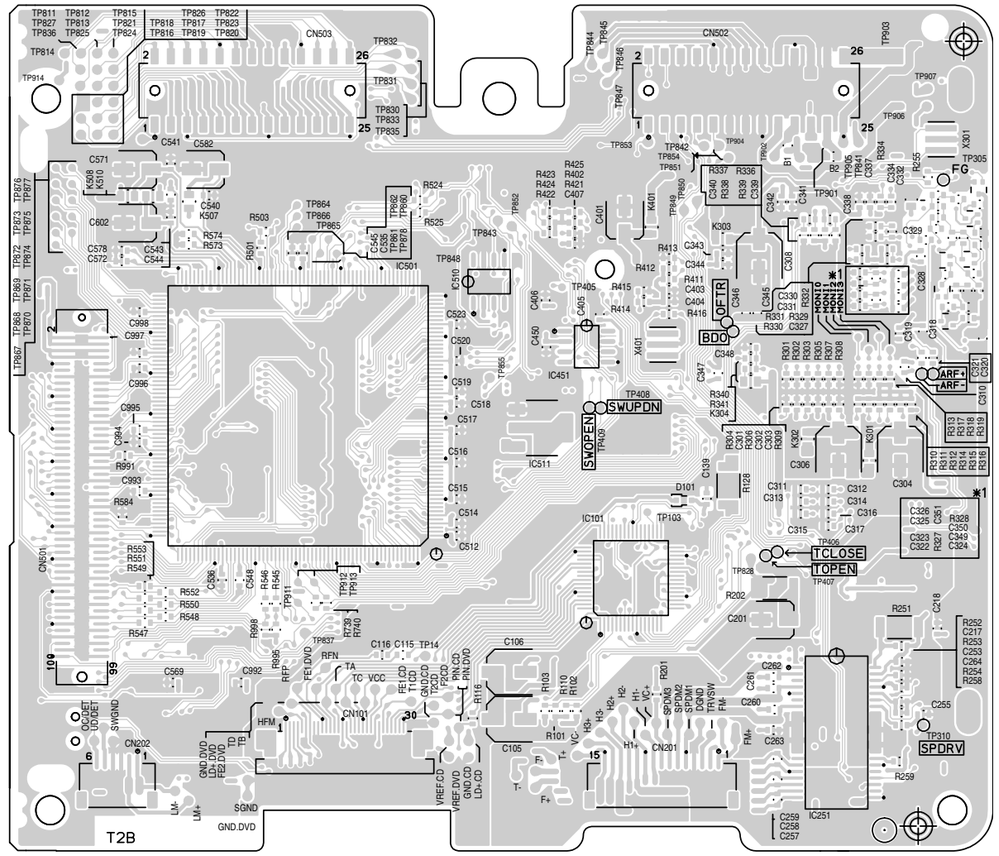


■ DVD servo board

Forward side

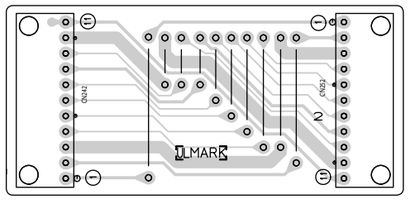


Reverse side

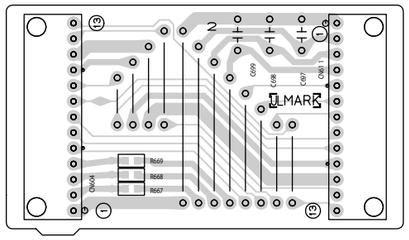


■ Front board

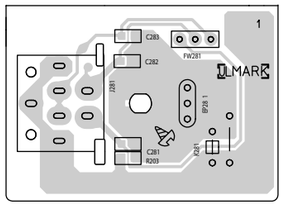
(Amp. connector board)



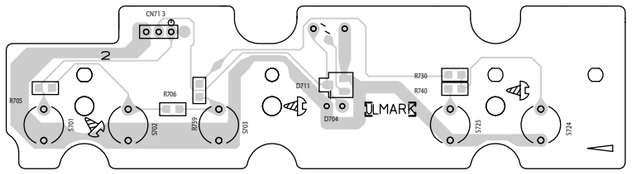
(DSP connector board)



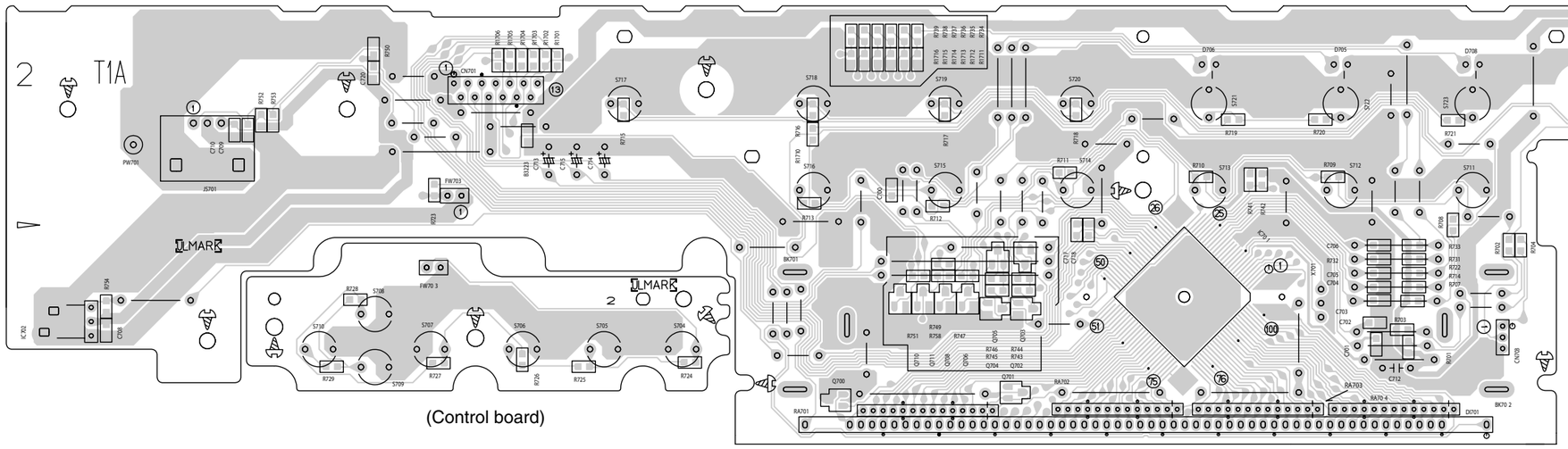
(Headphone board)



(Speaker SW. board)

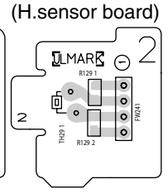


(FL board)

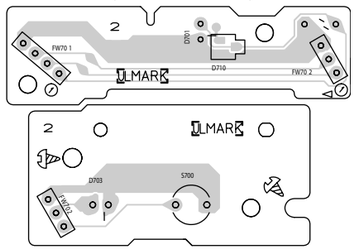


(Control board)

(H.sensor board)



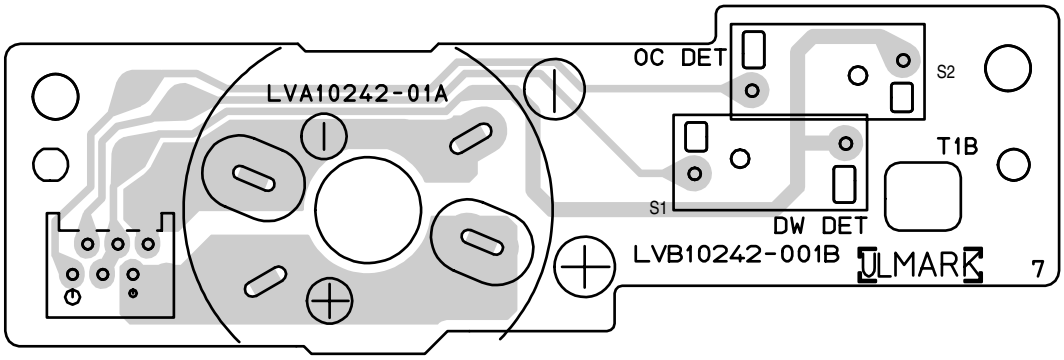
(Indicator board)



(Power switch board)

■ Spindle motor board

Reverse side



JVC
VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22023SCH)

Printed in Japan
WPC

PARTS LIST

[RX-DV31SL]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

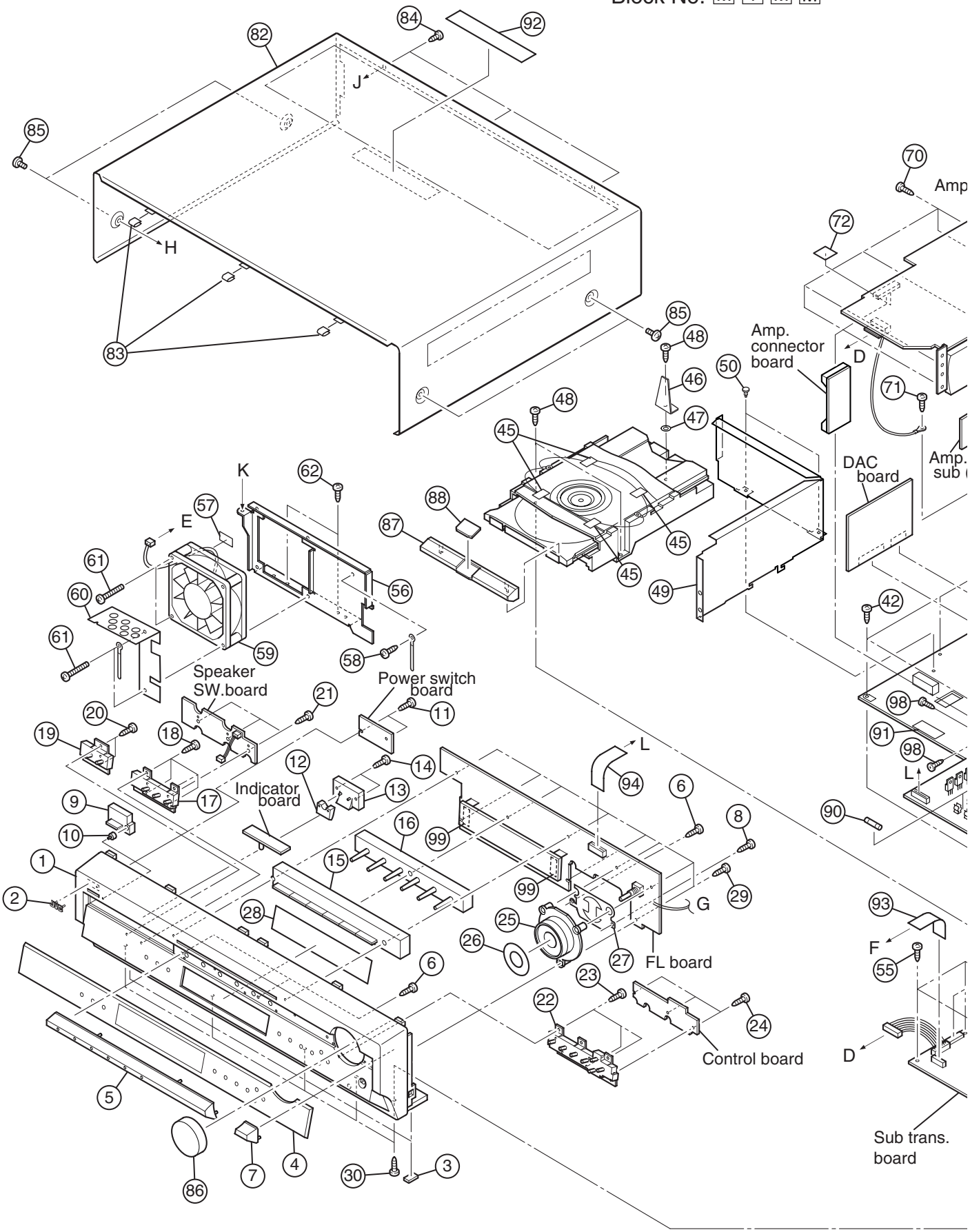
J ---------- U.S.A.
C ---------- Canada

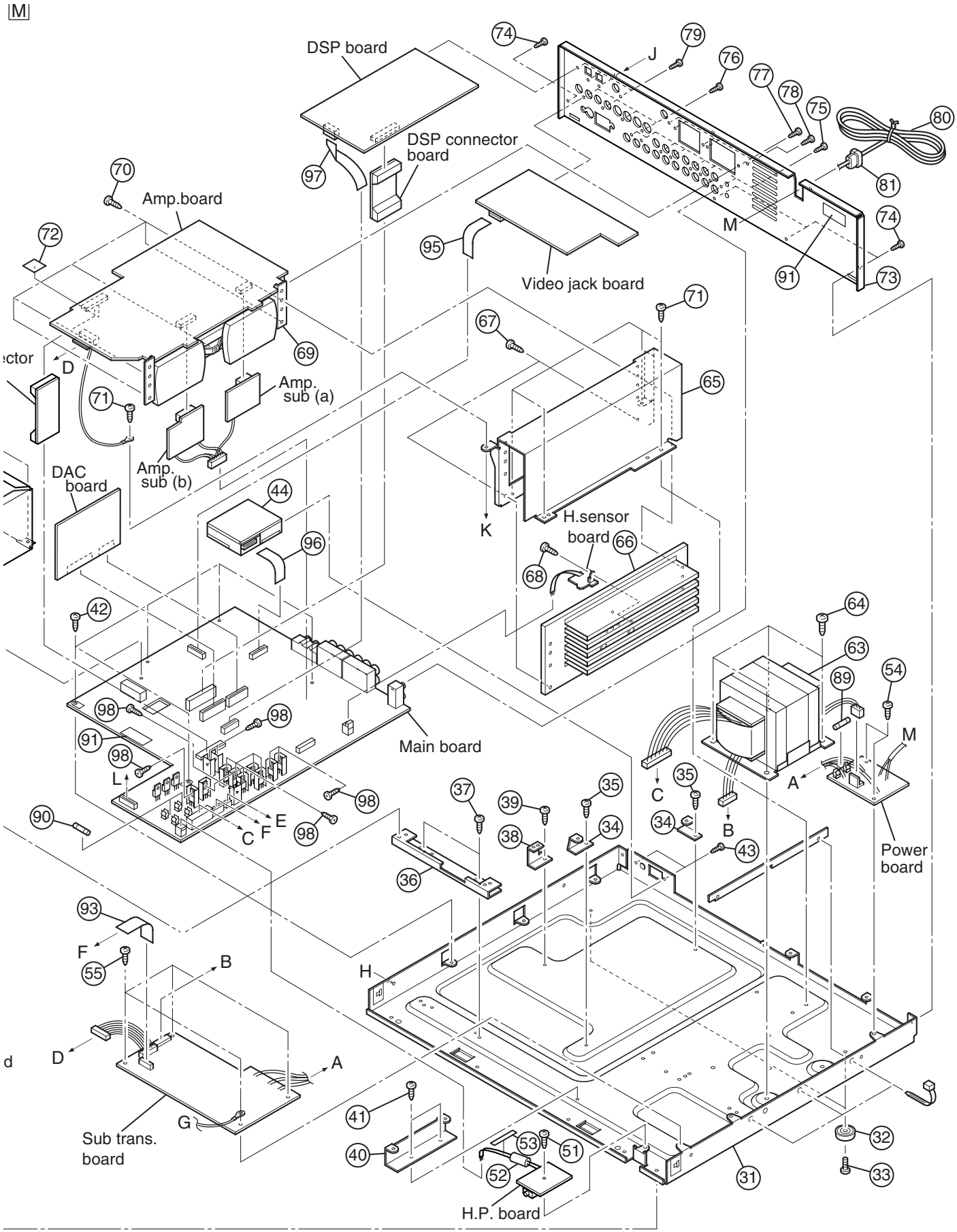
- Contents -

Exploded view of general assembly and parts list (Block No.M1) ---------- 3- 2
DVD mechanism assembly and parts list (Block No.MJ)---------- 3- 5
DVD loading base assembly and parts list (Block No.MN)---------- 3- 7
Electrical parts list (Block No.01~07) ---------- 3- 9
Packing materials and accessories parts list (Block No.M3)---------- 3-23

Exploded view of general assembly and parts list

Block No. M 1 M M




M
DSP board
DSP connector board
Amp.board
Video jack board
Amp. sub (a)
Amp. sub (b)
DAC board
H.sensor board
Main board
Power board
Sub trans. board
H.P. board

General assembly

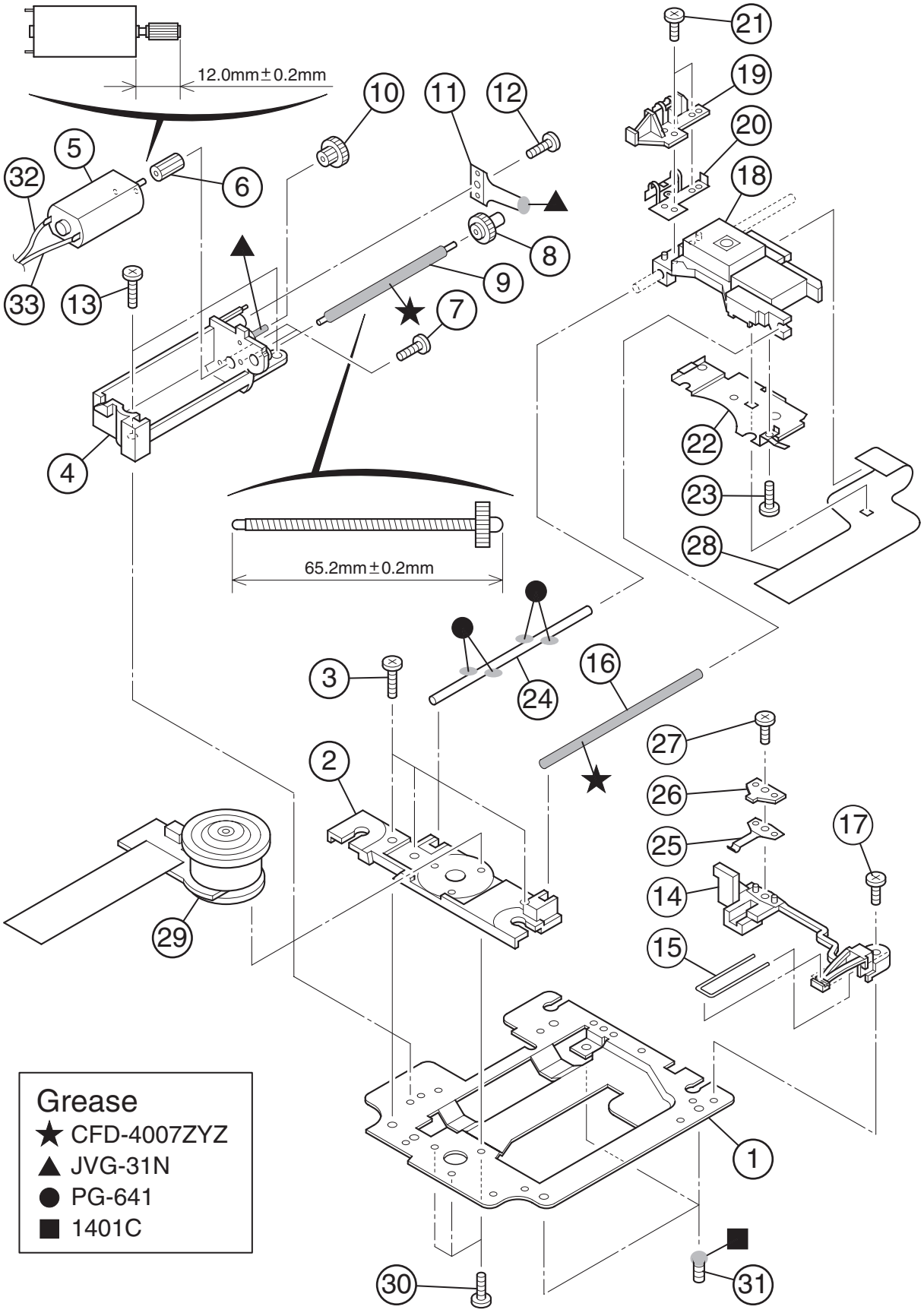
Block No. [M][1][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LV10652-010A	FRONT PANEL		
2	LV43338-002A	JVC MARK		
3	E75896-003	FELT SPACER	(x2)	
4	LV21470-004A	LENS		
5	LV33427-002A	ORNAMENT(L)		
6	QYSDSF2608Z	SCREW	2.6mm x 8mm(x3)	
7	LV33428-002A	ORNAMENT(R)		
8	QYSDSF2608Z	SCREW	2.6mm x 8mm	
9	LV33426-003A	PUSH BUTTON(PO)		
10	VJK4493-001SC	LENS(STANDBY)		
11	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
12	LV42877-002A	INDICATOR LENS		
13	LV33434-002A	LENS HOLDER		
14	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
15	LV21216-002A	PUSH BUTTON(SO)		
16	LV33425-001A	PUSH BUTTON(PL)		
17	LV33423-003A	PUSH BUTTON(DS)		
18	QYSDSF2608Z	SCREW	2.6mm x 8mm(x4)	
19	LV34195-001A	PUSH BUTTON(SPK		
20	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
21	QYSDSF2608Z	SCREW	2.6mm x 8mm(x3)	
22	LV21215-003A	PUSH BUTTON(CO)		
23	QYSDSF2608Z	SCREW	2.6mm x 8mm(x3)	
24	QYSDSF2608Z	SCREW	2.6mm x 8mm(x3)	
25	LV33433-002A	VOL.RING		
26	LV42880-001A	VOL.SHEET		
27	LV43217-002A	VOL.SHIELD		
28	LV42851-005A	FL SCREEN		
29	QYSDSF2608Z	SCREW	2.6mm x 8mm(x8)	
30	QYSBSG3008N	TAPPING SCREW	3mm x 8mm(x5)	
31	LV10653-003A	CHASSIS BASE		
32	E47227-021	FOOT ASSY	(x2)	
33	QYSBSG3008Z	TAPPING SCREW	3mm x 8mm(x2)	
34	LV41548-001A-NK	C.B BKT	(x2)	
35	QYSBST3006Z	TAPPING SCREW	3mm x 6mm(x2)	
36	LV33431-002A	MECHA BKT(F)		
37	QYSBST3006Z	TAPPING SCREW	3mm x 6mm(x2)	
38	LV42879-002A	MECHA BKT(R)		
39	QYSBST3006Z	TAPPING SCREW	3mm x 6mm	
40	LV33429-001A	C.B BKT		
41	QYSBST3006Z	TAPPING SCREW	3mm x 6mm(x2)	
42	QYSBSG3006E	TAPPING SCREW	3mm x 6mm(x5)	
43	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
44	QAU0307-002	TUNER		
45	LV30225-090A	SPECER	(x4)	
46	LE40874-002A	THRUST SPRING		
47	LV30226-037A	SPECER		
48	QYSBST3010Z	TAPPING SCREW	3mm x 10mm(x3)	
49	LV21222-002A	BARRIER		
50	FMYH4004-001	PLASTIC RIVET	(x2)	
51	QYSBSGG3008Z	TAP SCREW	3mm x 8mm	
52	QQR1267-001	FERRITE CORE	K 280	
53	LV30225-0M7A	SPECER		
54	QYSBSG3006Z	TAPPING SCREW	3mm x 6mm(x2)	
55	QYSBSG3006Z	TAPPING SCREW	3mm x 6mm(x4)	
56	LV21220-001A	FAN BRACKET		
57	LV30225-0F6A	SPECER		
58	QYSBST3006Z	TAPPING SCREW	3mm x 6mm	
59	QAR0244-001	FAN MOTER		
60	LV33801-001A	WIRE HOLDER		
61	QYSBSG3030Z	TAPPING SCREW	M3 x 30mm(x4)	
62	QYSBST3006Z	TAPPING SCREW	3mm x 6mm(x2)	
⚠ 63	QQT0371-002	POWER TRANSF		
64	QYSDST4008Z	TAP SCREW	M4 x 8mm(x4)	
65	LV21219-001A	H.SINK BKT		
66	LV21218-002A-NK	HEAT SINK		
67	QYSBSG3008Z	TAPPING SCREW	3mm x 8mm(x2)	
68	QYSBSG3008Z	TAPPING SCREW	3mm x 8mm	
69	LV33430-001A	IC BKT		
70	QYSBSG3008Z	TAPPING SCREW	3mm x 8mm(x5)	
71	QYSBST3006Z	TAPPING SCREW	3mm x 6mm(x5)	
72	LV30225-0F9A	SPECER		
73	LV21472-030A	REAR PANEL		DV31 SLJ
73	LV21472-031A	REAR PANEL		DV31 SLC
74	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x4)	
75	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x7)	
76	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x4)	
77	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x5)	
78	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
79	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x4)	
⚠ 80	QMPD220-200-JD	POWER CORD(US/CA)	2m BLACK	
⚠ 81	QZW0033-001	STRAIN RELIEF		
82	LV20962-005A/S/	TOP COVER		
83	LV30225-0E5A	SPECER	(x3)	
84	QYSDST3004M	TAP SCREW	M3 x 4mm(x3)	
85	E406308-004	SPECIAL SCREW	(x4)	
86	LV43536-001A	VOL.KNOB ASSY		
87	LV21217-002A	TRAY FITTING		
88	LV42878-005A	FITTING LENS		
⚠ 89	QMF51U1-5R0-J8	FUSE	F 101 5A AC125V	
⚠ 90	QMF51U1-2R0-J8	FUSE	F131 F132 2A AC125V(x2)	
91	LV43517-001A	FUSE CAUTION	(x2)	
92	E409396-003	CAUTION LABEL		
93	QUQ412-1015CJ	FFC WIRE		
94	QUQ412-1328CJ	FFC WIRE		
95	QUQ412-1606CJ	FFC WIRE		
96	QUQ412-1106CJ	FFC WIRE		
97	QUQ412-1217CJ	FFC WIRE		
98	QYSBSG3006E	TAPPING SCREW	3mm x 6mm(x11)	
99	E3400-431	SPECER	(x2)	

DVD mechanism assembly and parts list

Block No. M J M M

EXL-V73-1YPC



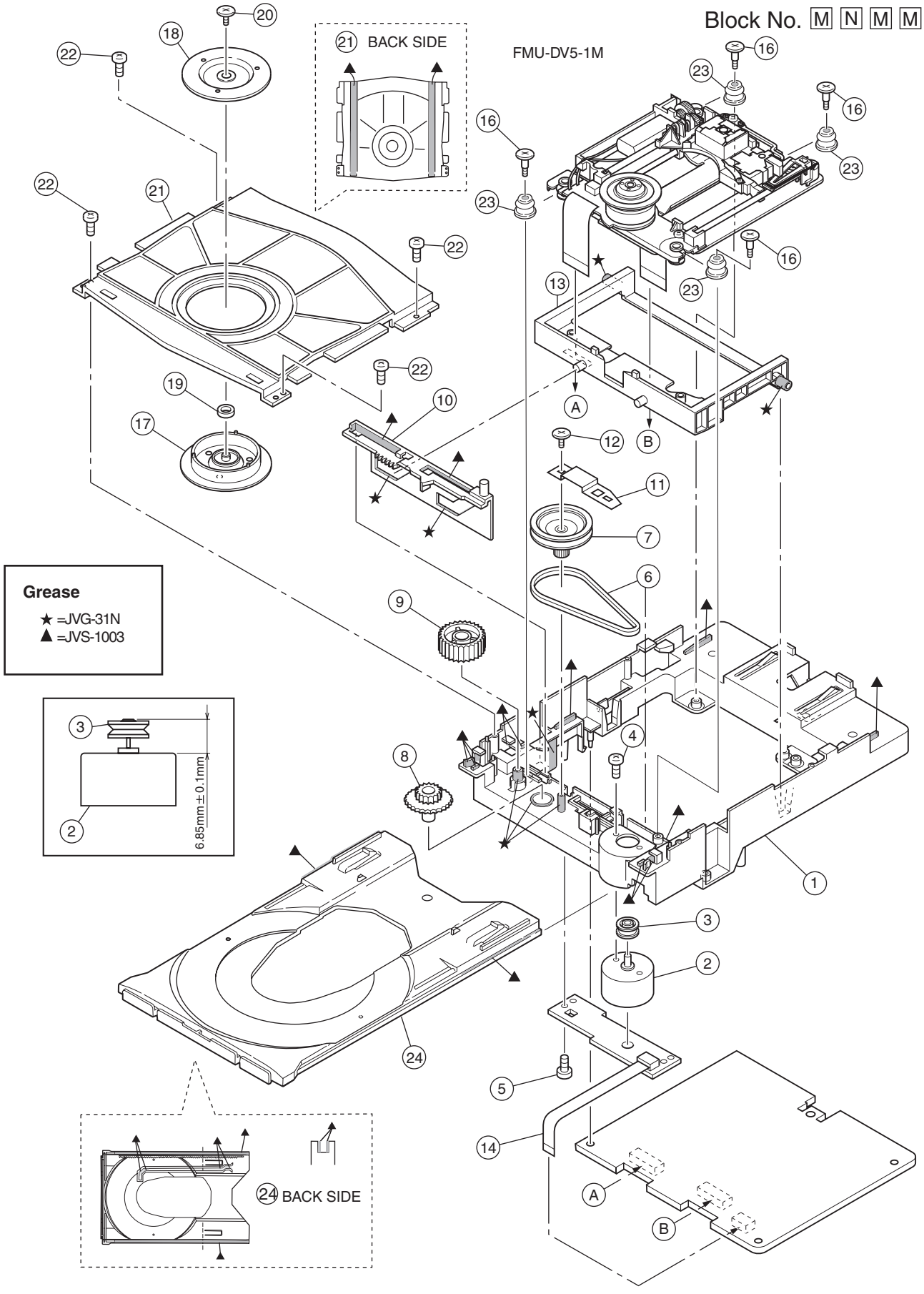
DVD mechanism

Block No. [M][J][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LE20520-002A	MECHA BASE		
2	LE20516-002A	SPINDLE BASE		
3	QYSDST2605M	TAP SCREW	M2.6 x 5mm(x3)	
4	LE30909-001A	FEED HOLDER ASSY		
5	QAR0165-001	FEED MOTOR		
6	LV41510-001A	FEED GEAR T		
7	QYSPSPU2040M	SCREW	M2 x 4mm(x2)	
8	LV41512-002A	FEED GEAR E		
9	LV41517-003A	LEAD SCREW		
10	LV41511-003A	FEED GEAR M		
11	LE40742-001A	THRUST SPRING		
12	QYSDSF2005Z	SCREW	2mm x 5mm	
13	QYSDST2605M	TAP SCREW	M2.6 x 5mm(x2)	
14	LE20517-001A	SHAFT HOLDER		
15	LE40744-001A	BAR SPRING(1)		
16	LV41121-002A	SHAFT		
17	QYSDST2605M	TAP SCREW	M2.6 x 5mm	
18	QAL0452-001	PICK UP		
19	LE20519-001A	SW ACTUATOR		
20	LE30886-001A	LEAD SPRING		
21	QYSPSFU1740Z	TAP SCREW	M1.7 x 4mm(x2)	
22	LE30888-003A	P.U.SPRING		
23	QYSPSGU1430Z	TAP SCREW	M1.4 x 3mm	
24	LV41121-002A	SHAFT		
25	LE40743-001A	T.SPRING(S)		
26	LE40774-001A	PLATE		
27	QYSDST2606Z	SCREW	2.6mm x 6mm	
28	QAL0284-001	FPC		
29	QAR0268-001	SPINDLE MOTOR		
30	QYSPSPU1760Z	SCREW	M1.7 x 6mm(x3)	
31	QYYASPF2608N	HEX SCREW	M2.6 x 8mm(x3)	
32	QUB549-05A1A1	SIN TWIST WIRE		
33	QUB544-05A1A1	SIN TWIST WIRE		

DVD loading base assembly and parts list

Block No. M N M M



DVD loading base

Block No. [M][N][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LV10454-007A-CK	LOADING BASE		
2	QAR0164-001	MOTOR		
3	LV42087-002A	MOTOR PULLEY		
4	QYSPSPU1730Z	SCREW	M1.7 x 3mm	
5	VKZ4777-003	MINI SCREW		
6	LV42209-001A	BELT		
7	LV42084-002A	PULLEY GEAR		
8	LV42085-002A	MIDDLE GEAR		
9	LV42086-001A	IDLE GEAR		
10	LV32514-002A	SLIDE CAM		
11	LV42348-001A	P GEAR BRACKET		
12	VKZ4777-003	MINI SCREW		
13	LV20912-002A	ELEVATOR		
14	QUQ410-0610CJ	FFC WIRE		
16	LV43245-001A	SPECIAL SCREW	(x4)	
17	LV32417-001A	CLAMPER		
18	LV42089-002A	YOKE		
19	LV42930-003A	P.C.MAGNET		
20	LV41741-001A	SPECIAL SCREW		
21	LV20913-002A	CLAMPER BASE		
22	QYSBSF2008Z	SCREW	2mm x 8mm(x4)	
23	LV41659-001A	INSULATOR	(x4)	
24	LV10455-002A-CK	TRAY		

Electrical parts list

Amp. board

Block No. [0][1][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW101	QUB112-30PPPP	SIN TWIST WIRE		
PW102	QUB111-32PPPP	SIN TWIST WIRE		
PW103	QUB116-28PPPP	SIN TWIST WIRE		
PW201	QUB110-24PPDM	SIN TWIST WIRE		
⚠ IC201	JCV8007	IC		
⚠ IC202	JCV8008	IC		
Q101	KRC105M-T	DIGI TRANSISTOR		
⚠ Q103	KTC3203/OY/-T	TRANSISTOR		
⚠ Q121	KTA1046/Y/	TRANSISTOR		
Q122	KTC3200/GL/-T	TRANSISTOR		
Q231	KTC3200/GL/-T	TRANSISTOR		
Q232	KTC3200/GL/-T	TRANSISTOR		
Q271	KTC3200/GL/-T	TRANSISTOR		
Q272	KTA1268/GL/-T	TRANSISTOR		
Q273	KTC3199/GL/-T	TRANSISTOR		
Q285	KTA1268/GL/-T	TRANSISTOR		
Q291	KTC3200/GL/-T	TRANSISTOR		
Q292	KTA1268/GL/-T	TRANSISTOR		
Q293	KTC3199/GL/-T	TRANSISTOR		
Q1231	KTC3200/GL/-T	TRANSISTOR		
Q1232	KTC3200/GL/-T	TRANSISTOR		
Q2231	KTC3200/GL/-T	TRANSISTOR		
⚠ D101	11ES2-T4	DIODE		
⚠ D102	11ES2-T4	DIODE		
⚠ D103	11ES2-T4	DIODE		
⚠ D104	11ES2-T4	DIODE		
D105	1SS119-041-T2	DIODE		
D108	1SS119-041-T2	DIODE		
D109	MTZJ6.8C-T2	Z DIODE		
⚠ D111	30DF2-FC	DIODE		
⚠ D112	30DF2-FC	DIODE		
⚠ D113	30DF2-FC	DIODE		
⚠ D114	30DF2-FC	DIODE		
⚠ D115	30DF2-FC	DIODE		
⚠ D116	30DF2-FC	DIODE		
⚠ D117	30DF2-FC	DIODE		
⚠ D118	30DF2-FC	DIODE		
D121	MTZJ30C-T2	Z DIODE		
D122	MTZJ6.2C-T2	Z DIODE		
D221	MTZJ15C-T2	Z DIODE		
D222	MTZJ15C-T2	Z DIODE		
D229	1SS119-041-T2	DIODE		
D230	1SS119-041-T2	DIODE		
D261	1SS119-041-T2	DIODE		
D262	1SS119-041-T2	DIODE		
D271	1SS119-041-T2	DIODE		
D293	1SS119-041-T2	DIODE		
D1221	MTZJ15C-T2	Z DIODE		
D1222	MTZJ15C-T2	Z DIODE		
D1229	1SS119-041-T2	DIODE		
D1230	1SS119-041-T2	DIODE		
D1261	1SS119-041-T2	DIODE		
D2229	1SS119-041-T2	DIODE		
D2261	1SS119-041-T2	DIODE		
C101	QFLC2AJ-472Z	M CAPACITOR	4700pF 100V J	
C102	QETN1EM-477Z	E CAPACITOR	470uF 25V M	
⚠ C103	QCZ9104-472	C CAPACITOR	4700pF	
C104	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C111	QFZ9076-104Z	MM CAPACITOR	0.1uF	
C112	QCE22HP-103	C CAPACITOR	0.01uF 500V P	
C113	QCE22HP-103	C CAPACITOR	0.01uF 500V P	
C115	QFZ9076-104Z	MM CAPACITOR	0.1uF	
C116	QCE22HP-103	C CAPACITOR	0.01uF 500V P	
C117	QCE22HP-103	C CAPACITOR	0.01uF 500V P	
C119	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C120	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C121	QETN2AM-107Z	E CAPACITOR	100uF 100V M	
C122	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
C123	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C200	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C201	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C202	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C203	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C204	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C205	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C206	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C207	QCS31HJ-3R0Z	C CAPACITOR	3pF 50V J	
C208	QCS31HJ-3R0Z	C CAPACITOR	3pF 50V J	
C211	QEZ0588-688	E CAPACITOR	6800uF	
C212	QEZ0588-688	E CAPACITOR	6800uF	
C213	QEZ0589-478	E CAPACITER	4700uF	
C214	QEZ0589-478	E CAPACITER	4700uF	
C221	QETN2AM-107Z	E CAPACITOR	100uF 100V M	
C222	QETN2AM-107Z	E CAPACITOR	100uF 100V M	
C223	QCS31HJ-120Z	C CAPACITOR	12pF 50V J	
C224	QCS31HJ-120Z	C CAPACITOR	12pF 50V J	
C231	QCBB1HK-222Y	C CAPACITOR	2200pF 50V K	
C232	QCBB1HK-222Y	C CAPACITOR	2200pF 50V K	
C241	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C242	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C243	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C244	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C251	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C252	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C269	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C270	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C271	QEKC1EM-106Z	E CAPACITOR	10uF 25V M	
C272	QEKC1CM-476Z	E CAPACITOR	47uF 16V M	
C285	QETN2AM-106Z	E CAPACITOR	10uF 100V M	
C291	QEKC1EM-106Z	E CAPACITOR	10uF 25V M	
C292	QEKC1CM-476Z	E CAPACITOR	47uF 16V M	
C1201	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C1202	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C1203	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C1204	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C1205	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C1206	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C1207	QCS31HJ-3R0Z	C CAPACITOR	3pF 50V J	
C1208	QCS31HJ-3R0Z	C CAPACITOR	3pF 50V J	
C1221	QETN2AM-107Z	E CAPACITOR	100uF 100V M	
C1222	QETN2AM-107Z	E CAPACITOR	100uF 100V M	
C1223	QCS31HJ-120Z	C CAPACITOR	12pF 50V J	
C1224	QCS31HJ-120Z	C CAPACITOR	12pF 50V J	
C1241	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1242	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1243	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1244	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1251	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C1252	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
C2201	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C2203	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C2205	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C2207	QCS31HJ-3R0Z	C CAPACITOR	3pF 50V J	
C2223	QCS31HJ-120Z	C CAPACITOR	12pF 50V J	
C2241	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C2243	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C2251	QCS31HJ-101Z	C CAPACITOR	100pF 50V J	
⚠ R101	QRZ9037-335	COMP RESISTOR	3.3MΩ 1/2W K	
⚠ R102	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R105	QRJ146J-821X	UNF C RESISTOR	820Ω 1/4W J	
⚠ R106	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R111	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R121	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R122	QRJ146J-682X	UNF C RESISTOR	6.8kΩ 1/4W J	
⚠ R123	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R124	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R201	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R202	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R203	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R204	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠ R205	QRJ146J-471X	UNF C RESISTOR	470Ω 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠R206	QRJ146J-471X	UNF C RESISTOR	470Ω 1/4W J	
R207	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R208	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R209	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
⚠R221	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R222	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R223	QRL017J-152	OMF RESISTOR	1.5kΩ 1W J	
⚠R224	QRL017J-152	OMF RESISTOR	1.5kΩ 1W J	
⚠R225	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
⚠R226	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
R227	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R228	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R229	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R230	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R231	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R232	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
⚠R233	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R234	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R235	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R236	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R237	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R241	QRJ146J-330X	UNF C RESISTOR	33Ω 1/4W J	
⚠R242	QRJ146J-330X	UNF C RESISTOR	33Ω 1/4W J	
⚠R243	QRL027J-100	OMF RESISTOR	10Ω 2W J	
⚠R244	QRL027J-100	OMF RESISTOR	10Ω 2W J	
⚠R261	QRJ146J-181X	UNF C RESISTOR	180Ω 1/4W J	
⚠R262	QRJ146J-181X	UNF C RESISTOR	180Ω 1/4W J	
R271	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R272	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R273	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R274	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R275	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R276	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R277	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R278	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R279	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
⚠R281	QRL027J-471	OMF RESISTOR	470Ω 2W J	
⚠R282	QRL027J-471	OMF RESISTOR	470Ω 2W J	
R285	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R286	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R291	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R292	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R293	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R294	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R295	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R296	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R1201	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R1202	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R1203	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R1204	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠R1205	QRJ146J-391X	UNF C RESISTOR	390Ω 1/4W J	
⚠R1206	QRJ146J-391X	UNF C RESISTOR	390Ω 1/4W J	
R1207	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R1208	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R1209	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
⚠R1221	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R1222	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R1223	QRL017J-152	OMF RESISTOR	1.5kΩ 1W J	
⚠R1224	QRL017J-152	OMF RESISTOR	1.5kΩ 1W J	
⚠R1225	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
⚠R1226	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
R1227	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R1228	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R1229	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R1230	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R1231	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R1232	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
⚠R1233	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠R1234	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R1235	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R1236	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R1237	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠R1241	QRJ146J-330X	UNF C RESISTOR	33Ω 1/4W J	
⚠R1242	QRJ146J-330X	UNF C RESISTOR	33Ω 1/4W J	
⚠R1243	QRL027J-100	OMF RESISTOR	10Ω 2W J	
⚠R1244	QRL027J-100	OMF RESISTOR	10Ω 2W J	
⚠R1261	QRJ146J-181X	UNF C RESISTOR	180Ω 1/4W J	
⚠R2201	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
⚠R2203	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠R2205	QRJ146J-391X	UNF C RESISTOR	390Ω 1/4W J	
R2207	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠R2225	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
R2227	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2229	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R2231	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
⚠R2241	QRJ146J-330X	UNF C RESISTOR	33Ω 1/4W J	
⚠R2243	QRL027J-100	OMF RESISTOR	10Ω 2W J	
⚠R2261	QRJ146J-181X	UNF C RESISTOR	180Ω 1/4W J	
L241	QQLZ005-R45	COIL	0.45uH	
L242	QQLZ005-R45	COIL	0.45uH	
L1241	QQLZ005-R45	COIL	0.45uH	
L1242	QQLZ005-R45	COIL	0.45uH	
L2241	QQLZ005-R45	COIL	0.45uH	
⚠T102	QQT0317-001	POWER TRANSF		
CN101	QGA7901C1-02	CONNECTOR	W-B (1-2)	
CN111	QGA3901C1-05	CONNECTOR	W-B (1-5)	
CN113	QJK012-051700	SIN CR C-B WIRE		
CN115	QGF1205C1-10	CONNECTOR	FFC/FPC (1-10)	
CN201	QGA3901F2-05	CONNECTOR	W-B (1-5)	
CN202	QGB2510J1-11	CONNECTOR	B-B (1-11)	
CN203	QGB2510J1-05	CONNECTOR	B-B (1-5)	
CN204	QGB2510J1-07	CONNECTOR	B-B (1-7)	
CN213	QGB2510K1-05	CONNECTOR	B-B (1-5)	
CN214	QGB2510K1-07	CONNECTOR	B-B (1-7)	
CN222	WJP0040-001A	E-SH C WIRE C-B		
EP102	QNZ0136-001Z	EARTH PLATE		
EP103	QNZ0136-001Z	EARTH PLATE		
FC100	QNG0020-001Z	FUSE CLIP		
FC101	QNG0020-001Z	FUSE CLIP		
J201	QNN0545-002	SURROUND JACK		
K200	QQR0779-001Z	COIL		
⚠RY101	QSK0142-001	RELAY		
⚠RY261	QSK0109-001	RELAY		
⚠RY262	QSK0109-001	RELAY		
⚠RY263	QSK0109-001	RELAY		
⚠RY264	QSK0109-001	RELAY		
ST201	QNB0159-001	SPK TERMINAL		
ST202	QNB0142-001	SPK TERMINAL		
TA101	QNZ0079-001Z	TAB		
TA102	QNZ0079-001Z	TAB		

Front board

Block No. [0][2][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW701	QUB220-08HPDM	SIN TWIST WIRE		
IC701	MN101C35DKF	PANEL MICOM		
IC702	GP1UM281XK	IR DETECT UNIT	Dual operation amplifier	
Q700	KRC107S-X	DIGI TRANSISTOR		
Q701	KRC107S-X	DIGI TRANSISTOR		
Q702	KRA107S-X	TRANSISTOR		
Q703	KRA114S-X	TRANSISTOR		
Q704	KRA107S-X	TRANSISTOR		
Q705	KRA114S-X	TRANSISTOR		
Q710	KRA107S-X	TRANSISTOR		
D701	LO561MBL3-60QNP	LED		
D703	SLR-342VC-T	LED		
D704	QLMP-KB49	LED		
D710	MA3082/H/-X	Z DIODE		
D711	MA3082/H/-X	Z DIODE		
C281	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C282	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C283	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C700	NCB31HK-102X	C CAPACITOR	1000pF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C701	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C702	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C703	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C704	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C705	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C706	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C708	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C709	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C710	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C711	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C712	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C713	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C714	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C715	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C717	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C718	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C720	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
R667	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R668	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R669	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R701	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R703	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R704	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R705	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R706	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R707	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R708	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R709	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R710	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R711	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R712	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R713	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R715	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R716	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R717	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R718	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R719	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R720	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R721	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R723	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R724	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R725	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R726	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R727	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R728	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R729	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R730	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R731	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R733	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R734	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R740	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R743	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R744	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R745	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R746	NRSA63J-751X	MG RESISTOR	750Ω 1/16W J	
R750	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R751	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R752	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R753	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R754	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R759	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1291	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1292	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1701	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1702	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1703	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1704	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1705	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1706	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1710	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1711	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
BK701	LV42882-001A	FL HOLDER		
BK702	LV42881-001A	FL HOLDER		
CN242	QGB2510K1-11	CONNECTOR	B-B (1-11)	
CN252	QGB2510K1-11	CONNECTOR	B-B (1-11)	
CN604	QGB2510K1-13	CONNECTOR	B-B (1-13)	
CN611	QGB2510K1-13	CONNECTOR	B-B (1-13)	
CN701	QGF1205F1-13	CONNECTOR	FFC/FPC (1-13)	
CN703	QGA2001F1-03	CONNECTOR	W-B (1-3)	
CN713	QJK021-030603	SIN CR C-B WIRE		
DI701	QLF0115-001	FL TUBE		
EP281	QNZ0136-001Z	EARTH PLATE		
FW241	QUM214-15DGZ4	PARA RIBON WIRE		
FW281	QUM213-18DGZ4	PARA RIBON WIRE		
FW701	QUM214-05Z4Z4	PARA RIBON WIRE		
FW702	QUM213-08Z4Z4	PARA RIBON WIRE		
FW703	QUM212-05Z4Z4	RIBON WIRE		
J281	QNS0188-001	JACK		
JS701	QSW1017-001	JOG VOLUME		
K285	NQR0389-003X	FERRITE BEADS		
S700	QSW0683-001Z	PUSH SW		
S701	QSW0683-001Z	PUSH SW		
S702	QSW0683-001Z	PUSH SW		
S703	QSW0683-001Z	PUSH SW		
S704	QSW0683-001Z	PUSH SW		
S705	QSW0683-001Z	PUSH SW		
S706	QSW0683-001Z	PUSH SW		
S707	QSW0683-001Z	PUSH SW		
S708	QSW0683-001Z	PUSH SW		
S709	QSW0683-001Z	PUSH SW		
S710	QSW0683-001Z	PUSH SW		
S711	QSW0683-001Z	PUSH SW		
S712	QSW0683-001Z	PUSH SW		
S713	QSW0683-001Z	PUSH SW		
S714	QSW0683-001Z	PUSH SW		
S715	QSW0683-001Z	PUSH SW		
S716	QSW0683-001Z	PUSH SW		
S718	QSW0683-001Z	PUSH SW		
S719	QSW0683-001Z	PUSH SW		
S720	QSW0683-001Z	PUSH SW		
S721	QSW0683-001Z	PUSH SW		
S722	QSW0683-001Z	PUSH SW		
S723	QSW0683-001Z	PUSH SW		
S724	QSW0683-001Z	PUSH SW		
S725	QSW0683-001Z	PUSH SW		
⚠ TH291	QAD0125-471	P THERMISTOR	110Åé 470Ω 16V	
X701	QAX0246-001Z	C RESONATOR	8.00MHz	

Main board

Block No. [0][3][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ IC191	SI-8033JF	IC		
⚠ IC192	SI-8050JF-F1	IC	Regulator	
⚠ IC193	SI-8090JF	IC		
IC301	M61516FP	IC		
IC303	BA15218F-XE	IC	Dual operational amplifier	
IC401	LA73054-X	IC	Video driver	
IC402	NJM2279M-W	IC		
IC403	NJM2279M-W	IC		
IC404	NJM2279M-W	IC		
IC761	MN101C49GMM1	IC		
IC763	IC-PST9139-T	IC		
⚠ Q141	2SD2395/EF/	TRANTRANSISTOR		
Q142	KRA102S-X	DIGI TRANSISTOR		
Q143	KRC102S-X	DIGI TRANSISTOR		
⚠ Q144	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q145	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q151	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q152	2SD2395/EF/	TRANTRANSISTOR		
Q153	KRA102S-X	DIGI TRANSISTOR		
⚠ Q154	2SD2395/EF/	TRANTRANSISTOR		
Q155	KRA102S-X	DIGI TRANSISTOR		

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q156	KRC102S-X	DIGI TRANSISTOR		
Q157	KRC102S-X	DIGI TRANSISTOR		
Q158	KRC102S-X	DIGI TRANSISTOR		
Q159	KRC102S-X	DIGI TRANSISTOR		
⚠ Q161	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q162	KTA1046/Y/	TRANSISTOR		
⚠ Q164	KTA1046/Y/	TRANSISTOR		
Q165	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q171	KTC3203/OY/-T	TRANSISTOR		
Q172	KRA102S-X	DIGI TRANSISTOR		
Q173	KRC102S-X	DIGI TRANSISTOR		
⚠ Q181	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q182	2SD2395/EF/	TRANTRANSISTOR		
⚠ Q183	KTC3203/OY/-T	TRANSISTOR		
Q191	KRC102S-X	DIGI TRANSISTOR		
Q192	KRC102S-X	DIGI TRANSISTOR		
Q193	KRC102S-X	DIGI TRANSISTOR		
⚠ Q194	KTC3203/OY/-T	TRANSISTOR		
Q381	2SC3576-JVC-T	TRANSISTOR		
Q382	2SC3576-JVC-T	TRANSISTOR		
Q383	2SC3576-JVC-T	TRANSISTOR		
Q384	2SC3576-JVC-T	TRANSISTOR		
Q385	2SC3576-JVC-T	TRANSISTOR		
Q386	KRA104S-X	DIGI TRANSISTOR		
Q434	KRA107S-X	TRANSISTOR		
Q760	KRC105S-X	CHIP D.TRANSISTOR		
Q765	KRC102S-X	DIGI TRANSISTOR		
Q766	KRC105S-X	CHIP D.TRANSISTOR		
Q767	KRC105S-X	CHIP D.TRANSISTOR		
Q768	KRC105S-X	CHIP D.TRANSISTOR		
Q769	KRC105S-X	CHIP D.TRANSISTOR		
Q771	KRC107S-X	DIGI TRANSISTOR		
Q799	KRC102S-X	DIGI TRANSISTOR		
Q1381	2SC3576-JVC-T	TRANSISTOR		
Q1382	2SC3576-JVC-T	TRANSISTOR		
Q1383	KRA104S-X	DIGI TRANSISTOR		
D125	11ES2-T4	DIODE		
D126	11ES2-T4	DIODE		
D127	11ES2-T4	DIODE		
D128	MA111-X	SI DIODE		
⚠ D131	10E2-FD	DIODE		
⚠ D132	10E2-FD	DIODE		
⚠ D133	11ES2-T4	DIODE		
⚠ D134	11ES2-T4	DIODE		
D141	MTZJ5.6C-T2	Z DIODE		
D145	MTZJ6.2C-T2	Z DIODE		
D151	MTZJ5.6C-T2	Z DIODE		
D155	MA111-X	SI DIODE		
D156	MTZJ16C-T2	Z DIODE		
D157	MTZJ13C-T2	Z DIODE		
D158	MTZJ10C-T2	Z DIODE		
D159	MTZJ7.5C-T2	Z DIODE		
D161	MTZJ15C-T2	Z DIODE		
D162	MTZJ15C-T2	Z DIODE		
D164	MTZJ8.2C-T2	Z DIODE		
D171	MTZJ11C-T2	Z DIODE		
D172	MA111-X	SI DIODE		
D181	MTZJ8.2C-T2	Z DIODE		
D182	MTZJ5.6C-T2	Z DIODE		
D187	MTZJ3.9B-T2	Z DIODE		
D188	MTZJ5.6C-T2	Z DIODE		
D189	MTZJ10C-T2	Z DIODE		
⚠ D191	SFPB-54-W	DIODE		
⚠ D192	SFPB-54-W	DIODE		
⚠ D193	SFPB-54-W	DIODE		
D194	MTZJ5.6C-T2	Z DIODE		
D195	MA111-X	SI DIODE		
D196	MA111-X	SI DIODE		
D197	MA111-X	SI DIODE		
D291	MA111-X	SI DIODE		
D761	MA111-X	SI DIODE		
D762	MA111-X	SI DIODE		
D791	MTZJ6.2C-T2	Z DIODE		
D1391	MA111-X	SI DIODE		
D1392	MTZJ4.7C-T2	Z DIODE		
C131	QFLC2AJ-104Z	M CAPACITOR	0.1uF 100V J	
C132	QFLC2AJ-104Z	M CAPACITOR	0.1uF 100V J	
C133	QFLC2AJ-104Z	M CAPACITOR	0.1uF 100V J	
C135	QETM1VM-338	E CAPACITOR	3300uF 35V M	
C136	QETM1VM-108	E CAPACITOR	1000uF 35V M	
C141	QETN1EM-107Z	E CAPACITOR	100uF 25V M	
C145	QETN1EM-107Z	E CAPACITOR	100uF 25V M	
C151	QETN1EM-107Z	E CAPACITOR	100uF 25V M	
C158	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C159	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C161	QETN1EM-107Z	E CAPACITOR	100uF 25V M	
C162	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C164	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C171	QETN1EM-107Z	E CAPACITOR	100uF 25V M	
C181	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C182	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C183	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C184	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C191	QETN1HM-227Z	E CAPACITOR	220uF 50V M	
C192	QETN1EM-477Z	E CAPACITOR	470uF 25V M	
C193	QETN1HM-227Z	E CAPACITOR	220uF 50V M	
C194	QETN1EM-477Z	E CAPACITOR	470uF 25V M	
C195	QETN1HM-227Z	E CAPACITOR	220uF 50V M	
C196	QETN1EM-477Z	E CAPACITOR	470uF 25V M	
C197	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C301	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C302	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C303	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C304	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C305	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C306	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C307	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C308	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C321	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C322	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C323	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C324	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C325	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C326	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C327	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C328	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C341	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C343	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C344	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C361	NCB31AK-154X	C CAPACITOR	0.15uF 10V K	
C362	NCB31AK-154X	C CAPACITOR	0.15uF 10V K	
C363	NCB31AK-154X	C CAPACITOR	0.15uF 10V K	
C364	NCB31AK-154X	C CAPACITOR	0.15uF 10V K	
C365	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C366	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C367	QEKC1HM-106Z	E CAPACITOR	10uF 50V M	
C368	QEKC1HM-106Z	E CAPACITOR	10uF 50V M	
C369	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C370	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C371	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C372	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C373	QEKC1EM-476Z	E CAPACITOR	47uF 25V M	
C374	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C375	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C376	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C381	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C382	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C383	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C384	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C385	QTE1H06-475Z	E CAPACITOR	4.7uF 50V	
C386	QEKC1HM-106Z	E CAPACITOR	10uF 50V M	
C401	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C402	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C404	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C405	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C406	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C407	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C408	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C409	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C410	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C411	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C412	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C413	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C421	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C422	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C423	QETN0JM-108Z	E CAPACITOR	1000uF 6.3V M	
C760	QETN0JM-228Z	E CAPACITOR	2200uF 6.3V M	
C765	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C766	QEKC1HM-225Z	E CAPACITOR	2.2uF 50V M	
C767	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C768	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C791	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C792	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C1101	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1102	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1103	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1104	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1105	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1191	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C1192	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C1193	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C1194	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C1195	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C1196	QETN0JM-228Z	E CAPACITOR	2200uF 6.3V M	
C1381	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1382	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1383	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1384	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1385	QEKC1HM-225Z	E CAPACITOR	2.2uF 50V M	
C1387	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C1388	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C1391	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C1401	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1402	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1405	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1406	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1407	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1408	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1409	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1410	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C1411	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1412	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1421	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1431	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1443	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1444	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1445	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1446	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1447	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1448	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1453	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1454	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C1461	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1462	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1471	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C1472	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1491	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C1492	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1493	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C1494	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1495	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1496	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1497	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1498	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1499	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1500	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
⚠ R141	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R142	QRJ146J-332X	UNF C RESISTOR	3.3kΩ 1/4W J	
⚠ R143	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R145	QRZ9005-120X	FUSI RESISTOR	12Ω	
⚠ R146	QRJ146J-272X	UNF C RESISTOR	2.7kΩ 1/4W J	
⚠ R147	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R148	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R151	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R152	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R153	QRJ146J-332X	UNF C RESISTOR	3.3kΩ 1/4W J	
⚠ R154	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R155	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R158	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R159	QRJ146J-182X	UNF C RESISTOR	1.8kΩ 1/4W J	
⚠ R160	QRJ146J-182X	UNF C RESISTOR	1.8kΩ 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ R161	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R162	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R163	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R164	QRJ146J-182X	UNF C RESISTOR	1.8kΩ 1/4W J	
⚠ R166	QRZ9005-120X	FUSI RESISTOR	12Ω	
⚠ R168	QRJ146J-332X	UNF C RESISTOR	3.3kΩ 1/4W J	
⚠ R169	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R170	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R171	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R172	QRJ146J-182X	UNF C RESISTOR	1.8kΩ 1/4W J	
⚠ R173	QRJ146J-150X	UNF C RESISTOR	15Ω 1/4W J	
⚠ R181	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R182	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R183	QRJ146J-332X	UNF C RESISTOR	3.3kΩ 1/4W J	
⚠ R184	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R185	QRZ9006-4R7X	FUSI RESISTOR	4.7Ω 1/4W J	
⚠ R186	QRZ9005-100X	FUSI RESISTOR	10Ω	
⚠ R187	QRJ146J-222X	UNF C RESISTOR	2.2kΩ 1/4W J	
⚠ R191	QRK126J-100X	UNF C RESISTOR	10Ω 1/2W J	
⚠ R192	QRJ146J-222X	UNF C RESISTOR	2.2kΩ 1/4W J	
⚠ R290	QRJ146J-181X	UNF C RESISTOR	180Ω 1/4W J	
R301	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R302	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R303	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R304	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R305	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R306	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R307	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R308	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R309	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R310	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R311	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R312	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R313	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R314	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R315	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R316	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R321	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R322	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R323	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R324	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R341	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R342	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R343	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R344	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R345	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R346	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R361	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
R362	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
⚠ R365	QRZ9006-5R6X	FUSI RESISTOR	5.6Ω	
⚠ R366	QRJ146J-150X	UNF C RESISTOR	15Ω 1/4W J	
⚠ R371	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
⚠ R372	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
⚠ R373	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R381	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R382	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R383	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R384	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R385	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R386	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R387	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R388	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R389	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R390	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R391	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R392	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R393	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R394	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R395	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R396	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R400	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R401	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R402	NRSA63J-360X	MG RESISTOR	36Ω 1/16W J	
R403	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R405	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R406	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R407	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R408	NRSA63J-360X	MG RESISTOR	36Ω 1/16W J	
R409	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R410	NRSA63J-360X	MG RESISTOR	36Ω 1/16W J	
R411	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R413	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R415	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R421	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R422	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R423	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R424	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R425	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R426	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R760	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R776	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R777	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R778	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R779	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R780	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R781	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R782	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R784	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R785	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R786	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R787	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R788	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R789	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R791	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R792	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R793	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R794	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R798	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R799	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R1101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1104	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1105	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1108	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1110	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1111	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1112	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1113	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1114	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1115	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1116	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1117	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1118	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1119	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1120	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1122	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1123	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1124	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1125	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1126	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1127	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1128	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1129	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1130	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1131	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1132	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1134	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1135	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1136	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1137	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1138	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1381	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1382	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R1383	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1384	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1385	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1386	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1387	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1388	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1389	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1391	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R1392	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R1393	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R1394	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R1395	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R1397	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	
R1398	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1399	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1401	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1402	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1405	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1406	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1407	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1408	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1409	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1410	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1411	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1412	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1417	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1418	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1419	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1420	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1421	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1422	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R1431	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1432	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R1443	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1444	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1445	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1446	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1447	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1448	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1453	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1454	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1461	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1462	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1471	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R1472	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
⚠ R1491	QRZ9006-5R6X	FUSI RESISTOR	5.6Ω	
⚠ R1492	QRJ146J-120X	UNF C RESISTOR	12Ω 1/4W J	
R1731	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R1732	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R1733	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1734	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
L191	QQL28AK-101	CHOKE COIL	100uH K	
L192	QQL28AK-101	CHOKE COIL	100uH K	
L193	QQL28AK-101	CHOKE COIL	100uH K	
L197	QQL244K-100Z	COIL	10uH K	
L198	QQL244K-100Z	COIL	10uH K	
L341	QQR0590-001	FILTER		
L342	QQR0590-001	FILTER		
CN114	QGF1205C1-13	CONNECTOR	FFC/FPC (1-13)	
CN121	QGA3901C1-08	CONNECTOR	W-B (1-8)	
CN122	QGA2501C1-02	CONNECTOR	W-B (1-2)	
CN125	QGF1205C1-10	CONNECTOR	FFC/FPC (1-10)	
CN212	QGB2510J1-11	CONNECTOR	B-B (1-11)	
CN231	QGA2501C1-08	CONNECTOR	W-B (1-8)	
CN241	QGD2501C1-04Z	CONNECTOR	(1-4)	
CN291	QGD2501C1-03Z	CONNECTOR	(1-3)	
CN301	QGF1205C1-11	CONNECTOR	FFC/FPC (1-11)	
CN402	QGF1205F1-16	CONNECTOR	FFC/FPC (1-16)	
CN412	QGF1205C1-16	CONNECTOR	FFC/FPC (1-16)	
CN512	QGB2027M9-26	CONNECTOR	B-B (1-26)	
CN513	QGB2027M9-26	CONNECTOR	B-B (1-26)	
CN612	QGB2510J1-13	CONNECTOR	B-B (1-13)	
CN614	QGF1205C1-12	CONNECTOR	FFC/FPC (1-12)	
CN761	QGF1205C1-06	CONNECTOR	FFC/FPC (1-6)	
CN911	QGB2016K1-15	CONNECTOR	B-B (1-15)	
CN912	QGB2016K1-13	CONNECTOR	B-B (1-13)	
EP101	QNZ0136-001Z	EARTH PLATE		
EP191	QNZ0136-001Z	EARTH PLATE		
⚠ FC130	QNG0020-001Z	FUSE CLIP		
⚠ FC131	QNG0020-001Z	FUSE CLIP		
⚠ FC132	QNG0020-001Z	FUSE CLIP		
⚠ FC133	QNG0020-001Z	FUSE CLIP		
FS401	E3400-431	SPECER		
HS141	E70306-001	HEAT SINK		

⚠ Symbol No.	Part No.	Part Name	Description	Local
HS144	E70306-001	HEAT SINK		
HS145	E70306-001	HEAT SINK		
HS151	E70306-001	HEAT SINK		
HS152	E70306-001	HEAT SINK		
HS154	E70306-001	HEAT SINK		
HS161	E70306-001	HEAT SINK		
HS162	E70306-001	HEAT SINK		
HS164	E70306-001	HEAT SINK		
HS165	E70306-001	HEAT SINK		
HS181	E70306-001	HEAT SINK		
HS182	E70306-001	HEAT SINK		
J301	QNN0478-001	SURROUND JACK		
J302	QNN0478-001	SURROUND JACK		
J401	QNN0479-001	SURROUND JACK		
J402	QNN0482-001	SURROUND JACK		
J403	QNN0482-001	SURROUND JACK		
J404	QND0091-001	S JACK		
J405	QND0091-001	S JACK		
J791	QNS0089-001	3.5 JACK		
⚠ RY291	QSK0109-001	RELAY		
X761	QAX0246-001Z	C RESONATOR	8.00MHz	

DSP board

Block No. [0][4][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC601	AK4527BVQP	IC	A/D D/A converter	
IC602	BA15218F-XE	IC	Dual operational amplifier	
IC603	BA15218F-XE	IC	Dual operational amplifier	
IC611	TC74HC4072AF-X	IC	OR gate	
IC612	MM74HC08SJ-X	IC	Quad. 2-input AND gates	
⚠ IC615	MM1563DF-X	IC	3.3V Regulator	
IC621	MM74HCU04SJ-X	IC	Inverter	
IC631	TC9446F-025	IC	Audio digital processor	
IC641	LP61L1024S-12-X	IC	SRAM	
IC651	BA15218F-XE	IC	Dual operational amplifier	
IC652	BA15218F-XE	IC	Dual operational amplifier	
IC661	BA15218F-XE	IC	Dual operational amplifier	
IC671	BA15218F-XE	IC	Dual operational amplifier	
IC672	BA15218F-XE	IC	Dual operational amplifier	
IC681	UPD784215AGC167	IC(MICRO C ROM)	Digital signal controller	
⚠ IC682	MM1613DN-X	IC	Regulator	
IC683	NC7ST32P5-X	IC(DIGITAL)	2-Input OR Gate	
Q631	DTC114YE-X	TRANSISTOR		
Q632	KRA104S-X	DIGI TRANSISTOR		
Q671	2SD1048/6-7/-X	TRANSISTOR		
Q672	DTC114YE-X	TRANSISTOR		
Q673	KRA104S-X	DIGI TRANSISTOR		
Q681	DTC114YE-X	TRANSISTOR		
Q2501	KRA104S-X	DIGI TRANSISTOR		
Q2521	2SC3576-JVC-T	TRANSISTOR		
Q2522	2SC3576-JVC-T	TRANSISTOR		
Q2561	2SC3576-JVC-T	TRANSISTOR		
Q2562	2SC3576-JVC-T	TRANSISTOR		
Q2581	2SC3576-JVC-T	TRANSISTOR		
Q2582	2SC3576-JVC-T	TRANSISTOR		
D621	MA111-X	SI DIODE		
D622	MA111-X	SI DIODE		
D631	MA111-X	SI DIODE		
D632	MA111-X	SI DIODE		
C601	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C602	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C605	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C606	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C607	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C608	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C609	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C610	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C611	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C612	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C613	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C615	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C616	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C617	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C618	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C619	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C620	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C621	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C622	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C623	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C624	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C625	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C626	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C627	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C628	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C629	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C631	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C632	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C633	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C634	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C635	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C636	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C637	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C638	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C639	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C640	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C641	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C642	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C643	NCS31HJ-180X	C CAPACITOR	18pF 50V J	
C644	NCS31HJ-220X	C CAPACITOR	22pF 50V J	
C645	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C646	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C647	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C648	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C680	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C681	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C682	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C683	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C684	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C685	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C686	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C687	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C688	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C689	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C690	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C691	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C692	QTE1C06-476Z	E CAPACITOR	47uF 16V	
C693	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C694	QTE1C06-336Z	E CAPACITOR	33uF 16V	
C695	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C696	QTE1C06-336Z	E CAPACITOR	33uF 16V	
C2500	QETN1CM-226Z	E CAPACITOR	22uF 16V M	
C2503	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2504	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2507	NCS31HJ-330X	C CAPACITOR	33pF 50V J	
C2508	NCS31HJ-330X	C CAPACITOR	33pF 50V J	
C2512	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2513	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C2514	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C2515	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C2516	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C2525	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C2526	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C2527	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C2528	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C2531	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2532	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2533	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2534	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2539	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C2540	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2551	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2552	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2555	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2556	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2561	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C2562	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C2563	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2564	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2569	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2570	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2575	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C2576	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C2577	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C2578	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C2581	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C2582	QETN1CM-106Z	E CAPACITOR	10uF 16V M	
C2583	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2584	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2585	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2586	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2587	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2588	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2589	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2590	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2592	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C2594	NCF31CZ-473X	C CAPACITOR	0.047uF 16V Z	
C2595	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C2597	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C2598	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
R601	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R602	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R603	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R604	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R605	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R606	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R607	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R608	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R611	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R613	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R615	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R619	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R620	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R621	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R622	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R623	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R624	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R631	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R632	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R633	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R634	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R635	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R636	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R637	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R638	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R639	NRSA63F-102X	MG RESISTOR	1kΩ 1/16W F	
R640	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R641	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R642	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R643	NRSA63F-103X	MG RESISTOR	10kΩ 1/16W F	
R644	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R645	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R646	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J	
R651	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R653	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R661	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R662	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R663	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R671	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R672	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R676	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R679	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R680	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R681	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R682	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R683	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R684	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R685	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R686	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R687	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R688	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R689	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R690	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R691	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R692	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R693	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R694	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R695	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R696	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R697	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R698	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R699	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2500	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2501	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2502	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2507	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2508	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2509	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2510	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2511	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2512	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2513	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2514	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2515	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2516	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2517	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2518	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2519	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2520	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2521	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2522	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2525	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2526	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2527	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2528	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2529	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2530	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2531	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
R2532	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
R2533	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2534	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2535	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2536	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2537	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2538	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2550	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2551	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2552	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2553	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2554	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2555	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
R2556	NRSA63J-752X	MG RESISTOR	7.5kΩ 1/16W J	
R2557	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2558	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2560	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R2561	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2562	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2563	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2564	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2565	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R2566	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R2567	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2568	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2575	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2576	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2577	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2578	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2581	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2582	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2583	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2584	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2585	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J	
R2586	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2587	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2588	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R2589	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2590	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R2592	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R2594	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R2595	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2596	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2597	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2598	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
CN601	QGB2510J1-13	CONNECTOR	B-B (1-13)	
CN602	QGF1205C1-12	CONNECTOR	FFC/FPC (1-12)	
EP601	E409182-001SM	GRAND TERMINAL		
J601	QNN0481-001	SURROUND JACK		
K601	NQR0269-004X	FERRITE BEADS		
UN661	GP1FA352RZ	OPT RECEIVER		
UN662	GP1FA352TZ	OPT TRANSMITTER		
X631	QAX0722-001Z	CRYSTAL	24.576MHz	
X681	QAX0719-001Z	C RESONATOR	6.144MHz	

DAC board

Block No. [0][5][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC901	MN35505-X	IC	DAC	
IC911	NJM4580E-W	IC	Ope amp.	
IC921	NJM4580E-W	IC	Ope amp.	
IC931	MN35505-X	IC	DAC	
IC941	NJM4580E-W	IC	Ope amp.	
IC951	NJM4580E-W	IC	Ope amp.	
IC961	MN35505-X	IC	DAC	
IC971	NJM4580E-W	IC	Ope amp.	
IC981	NJM4580E-W	IC	Ope amp.	
IC991	NJM4580E-W	IC	Ope amp.	
IC992	NJM4580E-W	IC	Ope amp.	
IC993	NJM4580E-W	IC	Ope amp.	
IC994	NJM4580E-W	IC	Ope amp.	
Q901	2SD1328/ST/-X	TRANSISTOR		
Q902	2SD1328/ST/-X	TRANSISTOR		
Q903	2SD1328/ST/-X	TRANSISTOR		
Q904	2SD1328/ST/-X	TRANSISTOR		
Q910	DTA144EKA-X	TRANSISTOR		
Q911	DTA144EKA-X	TRANSISTOR		
Q912	DTA144EKA-X	TRANSISTOR		
Q1903	2SD1328/ST/-X	TRANSISTOR		
Q1904	2SD1328/ST/-X	TRANSISTOR		
Q2903	2SD1328/ST/-X	TRANSISTOR		
Q2904	2SD1328/ST/-X	TRANSISTOR		
Q2971	DTC144EKA-X	DIGI TRANSISTOR		
Q2972	2SD1328/ST/-X	TRANSISTOR		
Q2993	DTA144EKA-X	TRANSISTOR		
C900	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C901	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C902	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C903	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C904	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C905	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C907	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C908	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C909	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C910	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C911	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C912	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C913	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C914	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C915	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C916	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C917	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C918	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C919	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C920	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C921	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C922	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C923	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C924	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C925	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C926	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C927	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C928	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C929	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C930	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C931	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C932	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C934	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C941	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C942	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C951	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C952	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C953	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C954	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C961	NEA71CM-476X	E CAPACITOR	47uF 16V M	
C962	NEA71CM-476X	E CAPACITOR	47uF 16V M	
C1900	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1901	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C1902	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1903	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C1904	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1905	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C1907	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C1908	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1909	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C1910	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C1911	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C1912	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C1913	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1914	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C1915	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C1916	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C1917	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1918	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1919	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C1920	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C1923	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C1924	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C1925	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1926	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1927	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1928	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1929	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C1930	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C1934	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C1941	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1942	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C1951	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C1952	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C1953	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C1954	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2900	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2901	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C2902	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C2903	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C2904	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C2905	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C2906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C2907	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C2908	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C2909	NEA70JM-107X	E CAPACITOR	100uF 6.3V M	
C2910	NEA71CM-106X	E CAPACITOR	10uF 16V M	
C2911	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C2912	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C2913	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C2914	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C2915	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C2916	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C2917	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2918	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2919	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C2920	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C2923	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C2924	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C2925	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2926	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2927	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2928	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2929	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C2930	NCS31HJ-561X	C CAPACITOR	560pF 50V J	
C2932	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C2934	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C2941	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2942	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2951	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2952	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2953	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2954	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2971	NCS31HJ-560X	C CAPACITOR	56pF 50V J	
C2972	NEA71EM-475X	E CAPACITOR	4.7uF 25V M	
C2973	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C2974	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
R900	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R901	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R902	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R903	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R904	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R905	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R906	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R907	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R908	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R909	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R910	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R911	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R912	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R913	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R914	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R915	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R916	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R917	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R918	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R919	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R920	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R921	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R922	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R923	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R924	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R925	NRSA63F-332X	MG RESISTOR	3.3kΩ 1/16W F	
R926	NRSA63F-332X	MG RESISTOR	3.3kΩ 1/16W F	
R927	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R928	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R929	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R930	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R931	NRSA63F-821X	MG RESISTOR	820Ω 1/16W F	
R932	NRSA63F-821X	MG RESISTOR	820Ω 1/16W F	
R933	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R934	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R935	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R936	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R937	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R938	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R939	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R940	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R941	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R942	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R943	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R944	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R947	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R948	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R949	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R950	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R951	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R952	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R953	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R954	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R955	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R956	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R959	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R960	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1900	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1901	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1902	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1903	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1904	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1905	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R1906	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1907	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1908	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1909	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1910	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1911	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R1912	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R1913	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R1914	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R1915	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1916	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1917	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1918	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1919	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1920	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1921	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1922	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1923	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1924	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R1925	NRSA63F-102X	MG RESISTOR	1kΩ 1/16W F	
R1926	NRSA63F-102X	MG RESISTOR	1kΩ 1/16W F	
R1927	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R1928	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R1929	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R1930	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R1931	NRSA63F-511X	MG RESISTOR	510Ω 1/16W F	
R1932	NRSA63F-511X	MG RESISTOR	510Ω 1/16W F	
R1937	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R1938	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R1939	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R1940	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R1941	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R1942	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R1943	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R1944	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R1947	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1948	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1951	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R1952	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R1953	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R1954	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R1959	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1960	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2900	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2901	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2902	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2903	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R2904	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R2905	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2906	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2907	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2908	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2909	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2910	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2911	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R2912	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R2913	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R2914	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R2915	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2916	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2917	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2918	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2919	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2920	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2921	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2922	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2923	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2924	NRSA63F-183X	MG RESISTOR	18kΩ 1/16W F	
R2925	NRSA63F-102X	MG RESISTOR	1kΩ 1/16W F	
R2926	NRSA63F-102X	MG RESISTOR	1kΩ 1/16W F	
R2927	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	
R2928	NRSA63J-362X	MG RESISTOR	3.6kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R2929	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R2930	NRSA63F-681X	MG RESISTOR	680Ω 1/16W F	
R2931	NRSA63F-511X	MG RESISTOR	510Ω 1/16W F	
R2932	NRSA63F-511X	MG RESISTOR	510Ω 1/16W F	
R2937	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R2938	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R2939	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2940	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2941	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2942	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2943	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R2944	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R2947	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2948	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2949	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2951	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2952	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2953	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2954	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2959	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2960	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2971	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R2972	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2973	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R2974	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2977	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2978	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R2979	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
CN901	QGB2016J1-15	CONNECTOR	B-B (1-15)	
CN902	QGB2016J1-13	CONNECTOR	B-B (1-13)	
K901	NQR0007-003X	FERRITE BEADS		
K902	NQR0007-003X	FERRITE BEADS		
K903	NQR0007-003X	FERRITE BEADS		
K904	NQR0007-003X	FERRITE BEADS		
K1901	NQR0007-003X	FERRITE BEADS		
K1902	NQR0007-003X	FERRITE BEADS		
K1903	NQR0007-003X	FERRITE BEADS		
K1904	NQR0007-003X	FERRITE BEADS		
K2901	NQR0007-003X	FERRITE BEADS		
K2902	NQR0007-003X	FERRITE BEADS		
K2903	NQR0007-003X	FERRITE BEADS		
K2904	NQR0007-003X	FERRITE BEADS		

DVD loading main board

Block No. [0][6][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC101	AN8703FH-V	IC	Frontend processor for DVD	
IC201	BA5983FM-X	IC	4-channel driver	
IC251	BA6664FM-X	IC	Motor driver	
IC301	MN103S26EGA	IC	Optical disc controller	
IC401	MN102L62GLF3	IC	UNIT CPU	
IC451	S-93C66AFJ-X	IC	Serial EEPROM	
IC501	NDV8611VWA	IC		
IC505	W986432DH-7	IC	Bits SDRAM	
IC509	SST39VF160-7CEK	IC (FLASH)	16 Mbit multi-purpose flash memory	
IC510	AK93C65AF-X	IC	EEPROM	
IC511	LM1117MP1.8-X	IC	Regulator	
IC512	74LCX373MTC-X	IC(DIGITAL)	Octal D-type latch	
IC513	74LCX373MTC-X	IC(DIGITAL)	Octal D-type latch	
IC521	MM74HCT32MTC-X	IC		
IC522	74LCX32MTC-X	IC(DIGITAL)	OR gate	
IC523	NC7SZ125P5-X	IC(DIGITAL)	Bus buffer gate with 3-state output	
Q101	KTA1001/Y/-X	TRANSISTOR		
Q102	KTA1001/Y/-X	TRANSISTOR		
Q103	DTA144EE-X	DIGI TRANSISTOR		
Q501	2SB1424/QR/-W	TRANSISTOR		
Q502	2SC2412K/RS/-X	TRANSISTOR		
Q801	2SC4617/R/-X	TRANSISTOR		
Q802	2SA1774/R/-X	TRANSISTOR		
Q803	2SC4617/R/-X	TRANSISTOR		
Q804	2SC4617/R/-X	TRANSISTOR		
Q805	2SC4617/R/-X	TRANSISTOR		
Q806	2SC4617/R/-X	TRANSISTOR		
Q807	DTC114EE-X	DIGI TRANSISTOR		
Q808	2SC4617/R/-X	TRANSISTOR		
D101	RB521S-30-X	SB DIODE		
D202	1SS355-X	SI DIODE		
C105	NEA70JM-476X	E CAPACITOR	47uF 6.3V M	
C106	NEA70JM-476X	E CAPACITOR	47uF 6.3V M	
C109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C110	NCS31HJ-221X	C CAPACITOR	220pF 50V J	
C111	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C113	NEA70JM-226X	E CAPACITOR	22uF 6.3V M	
C115	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C116	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C117	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C118	NCB31CK-273X	C CAPACITOR	0.027uF 16V K	
C119	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C120	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C121	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C122	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C123	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C124	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C125	NCB31HK-271X	C CAPACITOR	270pF 50V K	
C126	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C127	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C128	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C129	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C135	NEA70JM-476X	E CAPACITOR	47uF 6.3V M	
C137	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C138	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C139	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C141	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C142	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C143	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C144	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C146	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C201	NEA70JM-226X	E CAPACITOR	22uF 6.3V M	
C203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C204	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C205	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C207	NCB31HK-391X	C CAPACITOR	390pF 50V K	
C208	NCB31HK-391X	C CAPACITOR	390pF 50V K	
C211	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C212	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C215	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C216	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C217	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C218	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C251	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C252	NEA71AM-336X	E CAPACITOR	33uF 10V M	
C253	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C255	NCB31CK-153X	C CAPACITOR	0.015uF 16V K	
C256	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C257	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C258	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C259	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C260	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C261	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C262	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C263	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C264	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C301	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C303	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C304	NEA70GM-107X	E CAPACITOR	100uF 4V M	
C306	NEA70GM-107X	E CAPACITOR	100uF 4V M	
C308	NEA70GM-107X	E CAPACITOR	100uF 4V M	
C310	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C311	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C312	NCB31HK-561X	C CAPACITOR	560pF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C313	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C314	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C315	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C316	NCB31HK-271X	C CAPACITOR	270pF 50V K	
C317	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C318	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C319	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C320	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C321	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C322	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C323	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C324	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C325	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C326	NCB31CK-183X	C CAPACITOR	0.018uF 16V K	
C327	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C328	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C329	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C330	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C331	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C332	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C333	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C334	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C337	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C338	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C339	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C340	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C341	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C342	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C343	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C344	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C345	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C346	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C347	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C348	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C349	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C350	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C401	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C403	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C404	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C407	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C502	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C503	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C506	NCS31HJ-150X	C CAPACITOR	15pF 50V J	
C507	NCS31HJ-180X	C CAPACITOR	18pF 50V J	
C509	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C510	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C511	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C512	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C513	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C514	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C515	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C516	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C517	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C518	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C519	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C520	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C523	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C524	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C527	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C528	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C529	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C531	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C532	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C533	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C534	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C535	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C536	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C539	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C540	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C541	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C542	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C543	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C544	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C545	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C547	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C548	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C549	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C550	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C554	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C555	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C557	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C558	NCB11CK-105X	C CAPACITOR	1uF 16V K	
C569	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C571	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C572	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C573	NEA70GM-227X	E CAPACITOR	220uF 4V M	
C578	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C580	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C581	NEA70GM-227X	E CAPACITOR	220uF 4V M	
C582	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C601	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C602	NEA70GM-476X	E CAPACITOR	47uF 4V M	
C618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C801	NCS31HJ-680X	C CAPACITOR	68pF 50V J	
C802	NCS31HJ-680X	C CAPACITOR	68pF 50V J	
C803	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C804	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C805	NCS31HJ-820X	C CAPACITOR	82pF 50V J	
C806	NCS31HJ-221X	C CAPACITOR	220pF 50V J	
C807	NCS31HJ-180X	C CAPACITOR	18pF 50V J	
C808	NCS31HJ-181X	C CAPACITOR	180pF 50V J	
C809	NCB31HK-392X	C CAPACITOR	3900pF 50V K	
C810	NCB31CK-183X	C CAPACITOR	0.018uF 16V K	
C902	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C904	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C906	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C908	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C992	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C993	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C994	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C995	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C996	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C997	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C998	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1000	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C1001	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C1002	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C1003	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C1004	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C1005	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
R101	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R102	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R103	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R104	NRS125J-270X	MG RESISTOR	27Ω 1/2W J	
R105	NRS125J-270X	MG RESISTOR	27Ω 1/2W J	
R106	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R107	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R108	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R109	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R110	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R111	NRVA63D-243X	CMF RESISTOR	24kΩ 1/16W D	
R112	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R113	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R114	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R115	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R116	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R117	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R119	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
R120	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
R125	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R126	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R127	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R128	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J	
R129	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J	
R130	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R201	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R202	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J	
R203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R204	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R205	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R206	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R208	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R209	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R210	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J	
R211	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J	
R212	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R213	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R214	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R215	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R216	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R217	NRSA63J-201X	MG RESISTOR	200Ω 1/16W J	
R218	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R219	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R220	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	
R221	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R222	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R223	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R224	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R251	NRS125J-R47X	MG RESISTOR	0.47Ω 1/2W J	
R252	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
R253	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R254	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
R255	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R256	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R258	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R259	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R301	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R302	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R303	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R304	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R305	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R306	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R307	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R308	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R309	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R313	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R317	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R319	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R320	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R321	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R323	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R324	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R325	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R326	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R327	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R328	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R329	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R332	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R333	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R334	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R336	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R337	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R338	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R339	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R340	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R341	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R402	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R403	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R405	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R411	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R421	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R422	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R423	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R424	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R427	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R428	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R501	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R512	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R521	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R531	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R532	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R534	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R535	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R536	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R541	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R542	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R543	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R544	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R548	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R549	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R550	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R551	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R552	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R553	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R565	NRVA63D-622X	CMF RESISTOR	6.2kΩ 1/16W D	
R566	NRVA63D-132X	CMF RESISTOR	1.3kΩ 1/16W D	
R570	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R573	NRSA63J-162X	MG RESISTOR	1.6kΩ 1/16W J	
R574	NRSA63J-162X	MG RESISTOR	1.6kΩ 1/16W J	
R575	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R576	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R578	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R579	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R580	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R583	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R584	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R608	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R655	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R738	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R739	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R740	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R801	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R802	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R803	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R804	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R805	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J	
R806	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R807	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R808	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R809	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R810	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R811	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R812	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R813	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R814	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R815	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R816	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R817	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R818	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R991	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
L501	NQL044K-100X	COIL	10uH K	
CN101	QGF0522F1-30W	CONNECTOR	FFC/FPC (1-30)	
CN201	QGF1016F2-15W	CONNECTOR	FFC/FPC (1-15)	
CN202	QGF1016F2-06W	CONNECTOR	FFC/FPC (1-6)	
CN502	QGB2027L1-26X	CONNECTOR	B-B (1-26)	
CN503	QGB2027L1-26X	CONNECTOR	B-B (1-26)	
K101	NQR0007-002X	FERRITE BEADS		
K301	NQR0007-002X	FERRITE BEADS		
K302	NQR0007-002X	FERRITE BEADS		
K303	NQR0007-002X	FERRITE BEADS		
K304	NQR0007-002X	FERRITE BEADS		
K401	NQR0007-002X	FERRITE BEADS		
K501	NQR0007-002X	FERRITE BEADS		
K504	NQR0007-002X	FERRITE BEADS		
K505	NQR0007-002X	FERRITE BEADS		
K507	NQR0007-002X	FERRITE BEADS		
K508	NQR0007-002X	FERRITE BEADS		
K509	NQR0007-002X	FERRITE BEADS		
K510	NQR0007-002X	FERRITE BEADS		
K513	NQR0007-002X	FERRITE BEADS		
K515	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K518	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K519	NQR0007-002X	FERRITE BEADS		
K520	NQR0007-002X	FERRITE BEADS		
K556	NQR0129-002X	FERRITE BEADS		
K557	NQR0129-002X	FERRITE BEADS		
K558	NQR0129-002X	FERRITE BEADS		
K559	NQR0129-002X	FERRITE BEADS		

⚠ Symbol No.	Part No.	Part Name	Description	Local
K560	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K561	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K562	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K563	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K564	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K565	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K566	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K567	NQR0007-002X	FERRITE BEADS		
K568	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K569	NQR0007-002X	FERRITE BEADS		
K570	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K571	NQR0007-002X	FERRITE BEADS		
K572	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K573	NQR0007-002X	FERRITE BEADS		
K574	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K575	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K576	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K577	NQR0007-002X	FERRITE BEADS		
K578	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K579	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K582	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K586	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
X301	NAX0542-001X	C RESONATOR	16.93MHz	
X401	NAX0543-001X	C RESONATOR	13.50MHz	
X571	NAX0513-001X	CRYSTAL	27.000MHz	

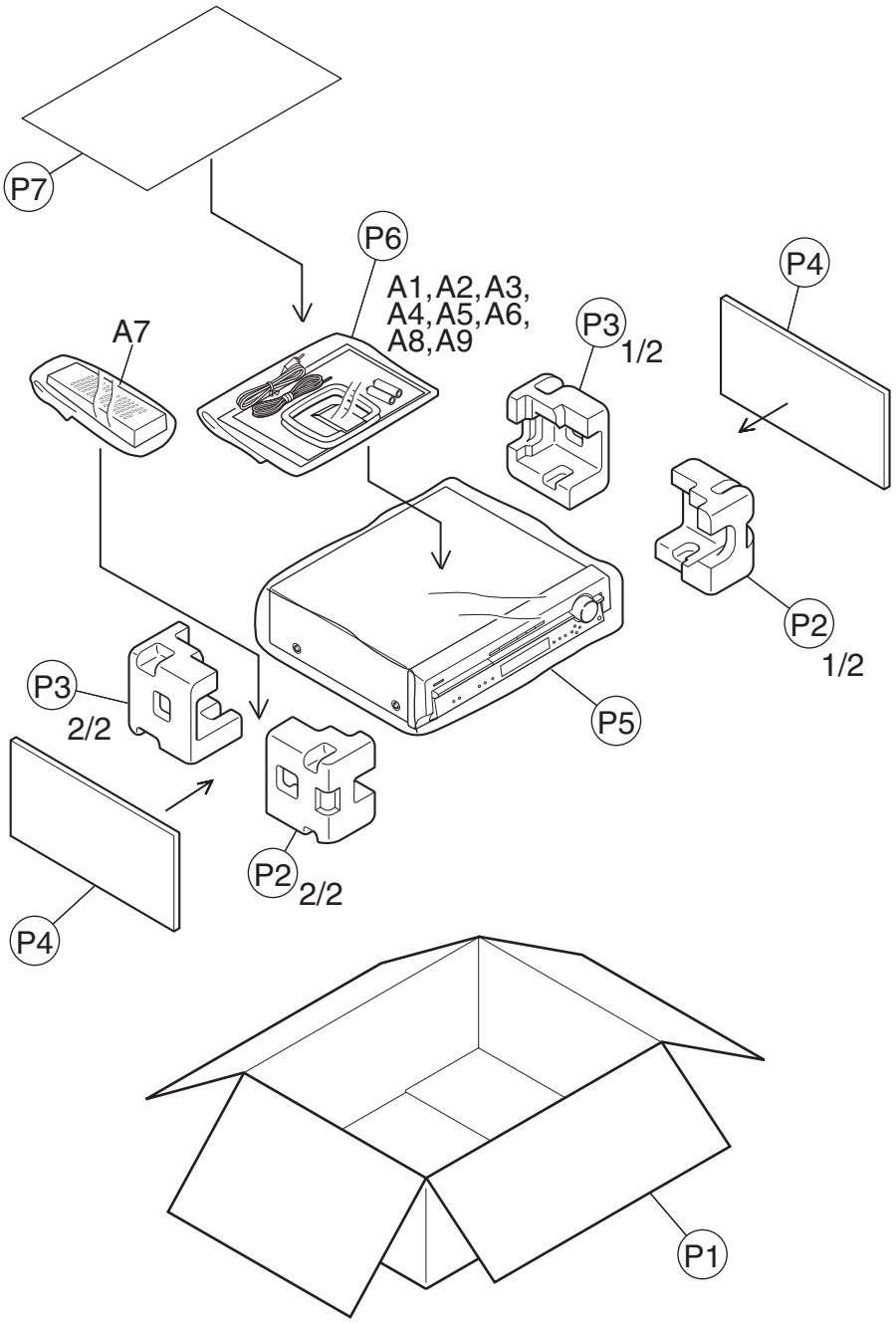
DVD loading switch board

Block No. [0][7][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
CN1	QGF1016F3-06	CONNECTOR	FFC/FPC (1-6)	
S1	QSW0910-002	SWITCH		
S2	QSW0910-002	SWITCH		

Packing materials and accessories parts list

Block No. M 3 M M



Packing and accessories

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A 1	LVT1001-001B	INST BOOK	ENG	DV31 SLJ
A 1	LVT1001-002A	INST BOOK		DV31 SLC
A 2	QAL0457-001	ANT.WIRE		
A 3	QAL0014-001	AM LOOP ANT		
A 4	BT-51028-2	J=REGIST CARD		DV31 SLJ
A 5	YU20333	SAFETY INST.		DV31 SLJ
A 6	QAM0236-001	VIDEO CABLE		
A 7	RM-SRXDV31J	REMOCON		
A 8	----------	BATTERY	(x2)	
A 9	BT-52006-2	WARRANTY CARD		DV31 SLC
P 1	LV33697-031A	CARTON		
P 2	LV21223-002A	CUSHION(F)		
P 3	LV21224-002A	CUSHION(R)		
P 4	LV32034-005A	SHEET	(x2)	
P 5	QPC06507015P	POLY BAG	65cm x 70cm	
P 6	QPA02503505P	POLY BAG	25cm x 35cm	
P 7	LV34501-001A	CARTON SPACER		